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Farm Department.

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THE EDITOR'S FARM NOTES.

TEACHING AGRICULTURE IN OUR RURAL SCHOOLS.

"Do you believe in it?" Most certainly we do, to a certain extent. In fact, a few of the elementary principles of agriculture have been taught in the public schools of this country for many years.

A large majority of the pupils of our district schools will pass their lives upon the farm. It is more essential that these pupils should become thoroughly familiar with some of these elementary principles than to spend their time studying certain things that will be of little value to them after their limited school experience is over.

In some of our schools vertical penmanship, or some other fad, is now taught for awhile; then something new will be taken up. How much better it would be to teach some of the elements of botany, physics, chemistry, geology and zoology on the "science primer" plan.

AN INTERESTING AND EASY STUDY.

These elements can all be studied and understood by pupils 12 to 14 years of age just as easily as they now study and understand physiology and hygiene.

When we attended school we did not know the names of 20 of the common weeds that grow every season upon the farm. We knew nothing about the wonderful germination and growth of plant life as it pertains to farm products. We knew how to put some grain and other provender before stock three times a day, but knew nothing about the wonderful science of breeding, feeding, and securing proper environments of stock in order to attain certain desired results.

We could not then appreciate the fact that plant food must be provided and the original fertility of the farm not only maintained but improved. In fact, plant food and soil fertility was something we never heard boys talk about in the school room or yard "in our time."

Many farmers (who do not read the agricultural papers) to-day do not believe in the necessity of knowing something about chemistry on the farm, in order to combat the pestiferous insect pests and fungi that almost worry the life out of these same ignorant farmers.

Many boys and girls become sick of farm life and farm work, simply because their parents never try to show them and teach them the beauties, the wonderful secrets, the independence, the contentment, and the necessity of a whole round of expert knowledge and practice which must ultimately become the fortunate possession of the "successful farmer," in the true acceptance of the term.

NO WONDER BOYS LEAVE THE FARM.

Boys grow up to manhood on the farm under varied conditions. Some of them have parents who take pains to interest them in the affairs or details of the farm from day to day each season through. Everything is explained to them, and, from the varied conditions which daily present themselves, the boys soon learn to become actively interested in "everything that comes along."

Many times when the writer visits a farm he can soon tell whether the boys like farming or not, from the way the father talks to and about his boys concerning the farm work in hand at the time. When the boys are continually scolded and found fault with about their work, and the father "runs them down" before "company," it is no wonder the boys become disgusted with farming.

We call to mind just now one farmer who was naturally lazy and who never did any more work than he was obliged to do each day. His stock was of the common sort, cared for in the too common way. The son had some ambition and tried to improve the condition of things, but the father always found fault with everything he did.

The boy grew to be a man, but his father always treated him as a child, never taking him into his confidence or consulting him about any of the many details of each season's farm work. If the boy took pains to do a job in nice shape, he was found fault with as being too slow, and a "putterer." If he hurried a job along, he was accused of killing the team or making a "bungling job of it."

To tell the truth, from what we have often seen and heard, it is a wonder to us that so many boys stay on the farm. And the difficulty of securing a remunerative position elsewhere probably explains the matter.

TO FARM OR NOT TO FARM.

Now we believe in letting a young man choose his own vocation in life, if he thinks he knows what it should be. Very few boys (and even men) do. In fact, this business of deciding what one will follow as a business or profession for life is getting somewhat out of date.

Opportunities for congenial work diametrically opposite to one's present employment, at an advanced age in life, will sometimes be quickly taken up, simply because it is more remunerative, or easier, or both.

If the young man likes farming and has opportunities to show his ambition and expert ability, he will usually make a successful farmer. But there is no such a "snap" in farm profits as many suppose, and certainly not so much in general farming as when our fathers were young men.

Again, if the young man is dissatisfied with farming, and wants to "try his hand" at some other pursuit, we believe in giving him a chance. The father should help his son to make a successful start, by inducing him to

commence at the bottom round of the ladder of the job he selects. There is nothing like commencing at the bottom and working up—feeling one's way along, to a certain extent—and the frequent words of encouragement (if nothing else) from friends will help a young man greatly at such a time as this.

AS TO ELEMENTARY PRINCIPLES OF AGRICULTURE.

We hope every brother farmer will study over this matter of teaching the elementary principles of agriculture in our district schools. It can be and ought to be done. The Farmers' Clubs and the Granges ought to thoroughly discuss the project. There ought to be a law, providing for this work, passed at the coming session of the legislature.

We do not believe in carrying this matter too far. Only the elements should be taught, and some of them have been for a long time. We have two text books on this subject before us as we write. These books are written in an easy style and technical terms are largely eliminated from the subject matter.

OUR SCHOOLROOM EXPERIENCE.

In the last school in which the writer taught, several years ago, one of these text books was used. We gave out short lessons, the pupils taking notes in the recitation, and the interest was greater than we anticipated. Some of the chapters were on the constituents of plants, the origin and formation of soils, composition of soils, their improvement, etc. Natural, artificial and concentrated manures, rotation of crops, selection of seeds, growth of animals, their constituents and animal food. The character and composition of grasses, fodders and feeds, their digestibility and nutritive ratio. The principles of breeding, as applied to the pure breeds of farm stock, are simply stated and easily understood. The character and composition of the products of the dairy and dairy management is taken up. And we guarantee that less stinking cow extract—called butter—would go into the general market from the farms in those districts where this topic was thoroughly taught in the schoolroom.

Our own experience in the schoolroom, and the importance of the subject for pupils living on farms, made us believe long ago that this subject would sometime become one of the leading studies in the rural schools of this country. We hope the time is nearly at hand.

GROWING AND CURING TOBACCO.

To the Editor of The Michigan Farmer:

Being a patron of your valuable paper, I make free to ask if you can, through the columns of your paper, give me some ideas in regard to tobacco culture, as to whether our climate is favorable; and also would like some points in tobacco growing for a beginner. Is there any publication to be had at all desirable? Hoping to be favored, I am respectfully,

Macomb Co., Mich.

J. BENEDICT.

As to climatic conditions, they are

not supposed to be favorable in this State for the culture of tobacco. It is too far north for a plant like the tobacco to do well under natural conditions. But in Connecticut and Wisconsin tobacco growers have succeeded in carrying on tobacco growing, apparently as successfully as in Virginia and Kentucky. It must be understood, however, that where natural conditions are favorable the business can be carried on at less expense, and with fewer failures, than where artificial means must be resorted to in order to make the business profitable. Thus the grower in Wisconsin must give the crop closer attention and keep his land in better shape than if he was growing the same crop in Southern Kentucky or around the James River in Virginia. There is no doubt that in some respects natural conditions are, if anything, more favorable in Michigan than in Wisconsin.

In selecting a site for the seed bed in which to start the plants, it is best to have it on the upland in the northern states to avoid the danger from frost as much as possible. In the South this is not necessary, and as the plants require a good deal of moisture, land contiguous to some stream or river is generally chosen. The soil should be a warm loam, and if newly cleared so much the better. If it is upland, and apt to become very dry, then arrangements should be made to supply moisture to the young plants artificially, by a windmill, or some other method.

The first thing necessary is the selection of a bed in which to start the young plants. Its size, of course, will depend upon the area that is to be set out in plants for the crop. To put the land for this bed in shape it is necessary to free it entirely from all foul seeds and insects, as the young tobacco plant is very tender, and weeds and grass will choke it out and stop its growth. This is generally done by turning the land over in the fall. If the land is new, and has been burned over in the process of clearing, it will be in good shape. If in a field that has been in cultivation, then the part selected for the bed should be covered over with brush, logs, rails, etc., and these materials set on fire. More fuel should be added until the soil has been steamed to the depth of several inches so thoroughly that all insects and seeds are destroyed. This work is best done in the fall when the soil is full of moisture, as the steaming can then be done most effectively. After the bed has been burned over, it should be broken up with a hoe, and worked until the soil for a couple of inches is thoroughly pulverized, and as mellow as possible. When the time comes to sow the seed an application of a good commercial fertilizer should be made by working it in with a rake—say 10 pounds to each 30 square yards. The great point is to provide a seed bed about two inches in depth, and in the best possible condition. The seed should be sown about six to eight

weeks previous to the date at which the latest killing frost may be expected, and that will vary in different localities. The idea is to have the plants ready to transplant into the field as soon as all danger from frost is past. To protect the young plants from frost the bed should be enclosed with boards, and a frame constructed which can be covered with cotton cloth, just as cold frames are made up by gardeners to start various plants.

The seed should be sown broadcast over the bed and then brushed in, after which it should be sprinkled with water and the soil firmed with the flat side of a spade. The sprinkling should be repeated twice a week, or even oftener if very dry, so that the bed will be kept in a moist condition. If the plants are vigorous and grow rapidly they will be ready to transplant in from six to eight weeks, depending upon the variety of seed sown. A week before transplanting, the covering of the bed should be removed for half an hour after the sun is well up, and the time increased from day to day so as to harden off the plants, the last day or two being left off altogether.

In preparing the seed for sowing it is best to place the amount required in a vessel and barely cover it with water. Let it soak until the water is all absorbed, which will probably be a couple of days. Then mix the damp seed with corn meal or ashes, in the proportion of one of seed to five of the meal or ashes. The seed is sown by hand like grass seed, and in this way the sower can determine how evenly it is done. The soaking of the seed will hasten its germination, and as the seed-coat or shell is very hard it is a necessary measure so as to have the plants started growing as soon as possible.

When the plants come up it will be necessary to thin them out, just as is done with other plants started in frames, or they will be so crowded that they will not do well. A plant should have at least a square inch of space to itself. The bed must be kept moist by frequent sprinkling, as mentioned above.

The time for transplanting will be as soon as possible after the last killing frost. The earlier this can be done safely the better, as it secures more moisture and greater freedom from insect pests. It will probably run from June 1 to June 15, one season with another, in this State.

Growers generally protect themselves from any loss of plants by frost, or otherwise, by making two beds, and sowing one a week or ten days later than the other. In this way the danger arising from a late frost can be partially obviated, as the plants from the late bed can be used to fill in where the early ones have been killed.

The field selected for the crop should be plowed in the fall, as this aids in the destruction of insects. The tobacco plant is a heavy feeder, and requires large amounts of fertilizer. Barnyard manure should be applied in the fall, and plowed under. Then in the spring the land should be plowed again, a good commercial fertilizer applied, and harrowed in. By applying the coarse manure in the fall it becomes well rotted before spring, and is then in good shape to nourish the young plants. About two weeks before it is time to set out the plants the land is again harrowed and laid out in rows by throwing a furrow each way with a plow. These rows should be from three to three and a half feet apart each way.

In the next issue we shall speak of the method generally followed in transplanting, cultivating, topping, cutting and curing the plant.

R. G.

For The Michigan Farmer.

LATE CULTIVATION OF CORN.

Late and continuous cultivation of corn I know is not generally advocated. The chief reason probably is that it takes up too much time, and then it is questionable with some whether it does any good. Personally, I believe that it well repays the farmer for all the extra work he puts on it.

Corn is a great feeder, one of the most voracious of our crops, and it stands to reason that it needs plenty of food when it reaches the two most important periods of its life. One is when it tassels out, and the other is when the grain is filling. Both of these periods come late in the life of the plants, and at a time when all culture is practically suspended. The corn therefore cultivated carefully through

its young life is finally abandoned when it is called upon to perform the chief functions of its existence. The result often is that corn which has made an excellent stalk growth fails to produce good ears with well filled grain. What is the reason?

My answer to the question is that the plants are not sufficiently nourished, and consequently I try to make up for it by artificial means. I cultivate the corn continuously just as long as it is possible to get the cultivator through the rows. This can be done by a careful man much later than the average farmer imagines. Then my method is to apply a perfect corn manure in sections. Instead of applying it all to the land at once, it is distributed over a long period.

The fertilizers are applied at the time the tassel first appears, again when the silk appears, and finally when the grains begin to fill. Applied at these times, just before a rain if possible, the growth of the corn is almost like magic. It takes on a richer green, and I know makes a decided gain in the ways desired.

By this method the corn receives the fertilizer just at the periods when called upon to undergo the greatest strain. Moreover, it is at a time of the year when hot, dry weather is apt to prevail. The fertilizer, which is in a condition to be taken up readily by the corn feeders, quickly helps the plants to withstand the drought, and prevents any set-back in the growth.

(We believe it pays to keep a dirt or dust mulch in the corn, even up to the time of cutting. This is always providing the work can be done by level and very shallow cultivation.—Ed.)

For The Michigan Farmer.

WORK ON THE FARM.

It has been a long time since I have written about our farm work. We have been so busy that we have had no time to write about anything. However, we can begin to see our way out now, and will try to write a little oftener for a time at least.

Our wheat is looking well. We sowed twenty-three acres on corn stubble, and three acres on early potato ground. Our corn ripened up early enough to cut before sowing. We went ahead of the corn cutters and sowed two rows with the five-tooth drill, making our shock rows ten rows wide. We cut the corn with a horse and sled cutter, carrying the corn as far as we could well handle the bunches, and stood the shocks on the two rows of sown wheat mentioned above.

This way of cutting made very large shocks, which stand up better than smaller ones. On the twenty-three acres, not a shock has fallen down, and the corn seemed to dry out all right. Before we began to cut corn we went through twice in a row with a wide tooth cultivator, and before drilling wheat we went the other way twice in a row. This left the ground in fine shape for the drill, completely tearing every bit of the ground up. We used the one-horse drill to sow after the corn was cut, for the reason that our man could sow seven acres a day with it; besides it always came out even rows in finishing up a land. It nearly always happens that a two-horse drill don't come out even when finishing up to the two rows that have been sown ahead. Sometimes it may lack a foot or two, then again it may over-reach in the finish.

Our rows are eighty rods long and as straight as an arrow, all the same width apart. The cultivator was run close up to the stubbles, so the drill could be spread apart wide enough to make no perceptible difference in the width of the drill marks where the rows of corn stood. The corn stubble are cut very low and even, and the long, straight rows of wheat look very nice.

Our corn is about half husked and cribbed, Oct. 15. It is all sound and needs no sorting. It is pitched from the huskers direct into crates and drawn to the crib as fast as husked. No corn is allowed to lie on the ground, covered up with fodder, for mice to work through. Everything is sleeked up clean as we go along, and fodder tied and set up. We use a flat-bottom rack, with a tight floor, 7½ feet wide and 16 feet long, put on a low-wheel, wide-tire wagon. It takes only a few minutes to load on fifty bushels, and can be unloaded as fast as a man can pick up a bushel crate and empty it. I can't see how farmers

got along 1,898 years without crates.

Our potatoes are of good quality, but poor yield, owing to the extreme drouth which caught them at a critical time. However, we will have all we want for our use and seed with some to spare.

The four acres of clover sown alone is a splendid "catch," but the weeds bothered terribly and have been an eyesore on that account. I would not have sown it alone, but I was anxious to get it to clover, for I don't think I ever had any on in the world before. I tried it on this same ground sown with a crop and failed and thought I would sow alone.

The clover sown on the wheat ground last spring is not so good as I hoped for. Somewhat spotted. Big in some places and not much of any in others. But I am going to let it stand and cut the best of it for hay and leave the poorer uncut, to remain on the ground. It has had the ground all to itself since harvest, no stock being allowed to run on it. But it did not seem to do well all summer. We had plenty of rains the fore part of the season, but for all that it did not grow as it ought to have done.

I clipped twelve acres the 15th of June for seed, but it never came up again in sufficient quantities to make seed. The twelve acres right by the side of it cut fully two tons of good hay to the acre.

So you see it was not a lack of clover for not coming up, but the dry, hot weather. We will have these 24 acres to plow for corn another year, and if there is anything in clover we will be prepared to get it. We planted our corn last spring on a very heavy clover sod, with about 40 tons of spoiled clover hay drawn out on the poorer places and spread. In places it was all that could be plowed under.

Although the drouth spoiled our potatoes, it did not hurt the corn any more where this large quantity of hay was plowed under than it did on other places of the field.

We planted with the intention of getting a hundred bushels of corn per acre, but we have to put up with ninety. Not bad for a season that looked so unfavorable at one time that we thought corn would be an entire failure. While some of our neighbors only a mile or two away got timely rains on their corn, myself and nearer neighbors got none until almost too late. However, we content ourselves with the possibility of getting it back at them another year.

Then a little frost came along and nipped some fields, including our own, while it left some of our more wicked neighbors' fields untouched. Yet I don't think there was any respect shown to anybody in this matter, only a few hot and cold waves that happened to come along. That is all.

Gratiot Co., Mich. I. N. COWDREY.

For The Michigan Farmer.

LEAVES, MUCK AND LITTER.

In the effort to conserve and improve the fertility of the land at as little expense as possible these three articles must not be overlooked. It is astonishing how much real manurial value can be obtained from them when intelligently used. They can as a rule be obtained by almost any farmer on almost any farm, or at least some of them can be obtained at no cost whatever.

In the first place the leaves of the forest and orchard contain considerable nutritious qualities, but they are usually in a form that cannot be easily appropriated by the plants. We know it to be a fact that the forest makes its own rich soil by depositing a layer of leaves on the ground, which as the years go by decay and form nitrogenous substances for the trees to live on. The leaves should be gathered in the fall in large quantities. They can be used as absorbents in the barnyard or stables. They make fair bedding for cows. In this way they become saturated, and gradually decay and form good fertilizers.

Another way to use the forest leaves is to mix them with good muck. Thick, black muck obtained from the low places and swamps is generally a fair fertilizer for sandy or porous clay soils without the addition of anything else. It does not do so well on thick, heavy soils, where the drainage is apt to be poor. But the muck is always improved in value by mixing forest leaves with it. First a layer of muck should be spread over a layer of forest leaves, and then more leaves and muck and so on until a considerable pile is formed. The leaves will gradually decay,

and they will help to separate the thick muck, and make it more porous. The result is that by spring the whole pile can be forked over, and the leaves will be so decayed that they will mix readily with the muck. By this method we combine two great fertilizers, and improve both by the process.

By litter is meant all of the sweepings of the fields, barnyard and garden and orchard. What a mass of dead and decaying material can be gathered in this way no one realizes until the effort is made to bring all of the litter together. This litter should not be put into the manure pile proper. It should be stored away separately, and be mixed with muck, rich soil, and watered frequently. Turn it over with a fork whenever possible, and in windy weather cover the top with solid dirt to keep it from blowing away. The action of the weather on the pile will be beneficial, and by spring a good part of it will be decayed and ready for use on the field.

Massachusetts.

C. S. WALTERS.

AS TO THAT CHEAP PAINT.

I see in my last Farmer Mr. E. W. Beers wishes a cheap paint for first coat on old siding. I will give him one for a first coat on old or new building which is cheap and beneficial.

Add three ounces of glue to one gallon of water and enough ochre or Venetian red, according to what color he wishes the second coat, say three or four pounds. Let the glue and ochre (or red) soak in the water overnight, then boil an hour or two. Keep it stirred or it will stick to the bottom of the dish and not dissolve well. Apply while warm.

If he should need much, make about the quantity he needs in a big kettle; then if he does not use it all in one day, just warm it up the next. It will not harm the kettle, and can be washed out clean while hot.

Have just used that alone, only mixed more red; then run over it with oil to give a gloss, but prefer to divide the color and mix some with the oil for a second coat.

If he does not use powdered glue, better dissolve the stick glue in warm water before putting it to soak overnight.

Wayne Co., Mich. S. H. WILDER, JR.

ANOTHER RECIPE.

In answer to Friend Beers' inquiry, I would say: Slack a peck of lump lime; while the liquid is a little warm, add four ounces of glue, dissolved, one quart raw linseed oil, and color to suit the taste, stirring all well together.

Leauee Co., Mich. R. A. WOOKEY.

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PUBLIC SALES OF SHORTHORNS.

Recent sales of Shorthorn cattle in the West show a very decided improvement in the range of values of this fine old breed. Prices are fully 50 per cent higher than three years ago, and the trend is steadily upwards. With present values for beef cattle, and the wide range existing between smooth, well finished steers and the common native sorts there is an ample margin afforded for the cattle breeder and feeder to invest in good blood to improve his herd. We note, too, that in Great Britain the advance in Shorthorns has been much greater than with us. For instance, at a public sale of Mr. Marr, of Uppermill, this season, the average for the entire lot was \$380, and in 1897 it was \$225. A Mr. Duthie got an average of \$400 this year, as compared with \$300 last year. At the Duthie sale the top price was \$1,650 for a young bull, and the party who pushed the price to those figures was an Ohio breeder, who only gave up at the last bid. On both sides of the water there is evidently a strong revival of interest in Shorthorns.

In this connection we note that the famous Steele herd, of Ionia, this State, which contains more high bred Bates cattle than any other on the continent, will be offered at public sale on Thursday, Nov. 10th, particulars of which will be seen in advertisement in another column. The lot to be offered consists of Aldrie and Grand Duchesses, Oxford, Wild Eyes, Thorneale Roses, Peri, Oxford Vanquish, Harriets, and Nellie Blys. There are 37 females and 10 bulls. The bulls are all young, the oldest being dropped in 1895, the others being yearlings and last spring's calves. The sires to which they trace are 2d Duke of Brant 55479, a pure Duke, imp. Duke of North Oaks 2d 85955, also a Duke, Cambridge Duke of Haddington 6th 131936, a Thorneale Rose with Duke tops, and Grand Duke of Haddington 5th 131573. There are seven Aldrie Duchesses among the females. There will never again be such an opportunity to secure the choicest animals of Bates blood as this sale offers, because there is no other herd in existence which contains them. A lot of the best of this herd should stay right in this State. They are badly needed, and it certainly looks like a very favorable time to invest in good Shorthorns.

OPINIONS OF PACKERS.

In gathering information for the recent quarterly report of the Kansas Board of Agriculture, entitled "Pork Production," Secretary F. D. Coburn addressed a series of inquiries to a number of leading live stock commission merchants at Kansas City and Chicago stock yards to obtain their observations on various aspects of the swine business from their standpoint as receivers and sellers of the farmers' finished product. Following are some of the questions and the replies made thereto by some of the firms addressed:

About what are the ages and weights of the hogs for which you find most ready sale?

Elmore.—Hogs averaging 225 to 275 pounds, and 8 to 14 months old are the most salable.

Scruggs.—From 160 to 260 pounds, and 6 months to 1 year old.

Campbell.—Ten to 12 months old, weighing 275 to 325 pounds.

Siegel.—Nine to 12 months; weight 250 to 300 pounds.

Drovers.—Twelve to 15 months old, averaging 225 to 275 pounds.

Clay.—Six to 12 months old, and weighing 170 to 320 pounds.

At these ages and weights, are they usually preferred thoroughly or only moderately fattened?

Elmore.—Must be thoroughly fattened.

Scruggs.—For the lighter grades of meat it is desirable that they be only moderately fat. On heavier weights the relative value of lard largely decides.

Campbell.—We prefer them thoroughly fattened.

Siegel.—Thoroughly fattened.

Drovers.—Thoroughly fattened.

Clay.—Hogs weighing 170 to 230 pounds are preferred, as a rule, when

on the rangy order, or only moderately fattened, while those weighing 240 pounds and upwards seem to meet the requirements of the trade best when well fattened.

Do color or breed (if weights suit the buyers) have anything to do with the prices which hogs bring?

Elmore.—Uniformity of color is pleasing to the eye, and is likely to impress the buyer more favorably than if colors are mixed. Two or three white hogs, not very good, in a load of blacks, or vice versa, would be likely to lessen the price of all.

Scruggs.—The breed is likely to affect the price, but no attention is given to color except as an indication of breed.

Campbell.—The breed influences the price to some extent.

Siegel.—They sell best when all one color.

Drovers.—Berkshires and Poland-Chinas are preferred.

Clay.—No, buyers do not consider either color or breed, so long as the hog itself is of the desired weight and style.

Do buyers, under any circumstances, discriminate in favor or against white hogs?

Elmore.—After scalding white hogs and the hair is scraped off, the skin often has a reddish tinge, while that of black hogs appears white, and hence are more salable when butchered, causing a slight partiality toward the black hogs.

Scruggs.—Not if otherwise equally good.

Campbell.—Buyers make no discrimination as to color.

Siegel.—Color makes no difference.

Drovers.—Buyers do not discriminate against white hogs, providing they show good breeding and weights and fat are favorable.

Clay.—Not if equal in quality.

Is there any special or growing demand for a class of lean or so-called "bacon" hogs, and, if so, of what breeds, weights and characters are those regarded as most desirable?

Elmore.—There has always been more or less of a demand for bacon hogs, the increase or decrease of which depends largely upon the European markets.

Scruggs.—Yes, there is a special demand for hogs of light and medium weights.

Campbell.—There is no particular demand for so-called bacon hogs.

Siegel.—No, but there always has been a demand for a few thin bacon hogs, but no choice as to breed. Our best bacon hogs are usually bought to supply the English trade, and they ought to weigh 140 to 160 pounds.

Drovers.—There is a good and growing demand for bacon hogs. Any of the breeds answer the purpose, providing they are in proper flesh. They must be only moderately fat, and the longer the sides the better. Short, blocky, fat hogs are not desirable for this purpose.

Clay.—None that the open market would indicate in any way. For instance, to-day's market found heavy hogs the best, that is, those weighing 280 to 325 pounds selling at \$3.90 to \$4 per hundredweight, while the best bacon grades would not bring over \$3.95 per hundredweight. At different times the heavy, medium, and light-weight hogs will sell at a premium over one another, but seldom to any marked extent of late years, and we would not advise the average feeder to handle his hogs with a view to developing a purely bacon grade.

STOCK RAISING.

As a rule meats fluctuate much less in value than grains, vegetables and fruits. The retailers sell meats for about the same price year after year, but farm produce of all kinds go high or low according to the state of the supply. Judging from outward appearances then, the man who raises cattle, sheep, swine and similar live stock is better off than the farmer who merely raises fruits, vegetables and grains. It is possible that far-sighted, shrewd wholesale meat dealers take advantage of the individual stock growers by paying small prices for their cattle, and then retailing them at the old standard prices. Probably the retailer is the one who keeps prices at an even figure year after year, making the consumer pay top prices even when there is a glut of live stock in the market.

However this may be, the man who raises beef, pork, mutton or other meats, has an advantage of the farmer

who devotes himself to ordinary farm produce. There is more profit to-day in raising live stock because the farmer can depend upon a very even, constant market quotation for his produce, and if the prices do not suit him it is possible to carry his live stock over to another season. The produce farmer has no such chance. He must sell when his produce is ready for the market whether prices are satisfactory or not. Just at present there is a better chance than usual for the stock farmer, because the supply of cattle, swine and sheep is not over-plenty in this country.

The idea that the Western cattle raisers have monopolized the meat market to the exclusion of those living near large cities in the East is a glaring fallacy. A large percentage of the Western meat is poor in quality. The animals are raised on such a large scale that proper attention cannot be given to them. Beef more than mutton and pork from the West is inferior to the best in the market. There is a large class of small farmers who are taking advantage of this condition to raise the very best beef for the high-class trade. The animals are not exactly spoon-fed and hand-raised, but they are surrounded by conditions that tend to make them first-class. Their meat is tender, sweet and juicy. Fancy prices are always paid for such beef in the large cities. It pays such farmers to leave produce and truck farming to those who know less about the needs of the stock market, and to devote most of their attention to the raising of first-class animals.

Ohio.

E. P. SMITH.

STOCK NOTES.

The Berkshire appears to be the favorite hog in the South, where the razor-back has been relegated to the rear.

It is given out that the soldiers of England, Russia and Japan will hereafter include American canned beef in their rations.

Owing to the disastrous drouth in England the past season sales of stock cattle show a decline of \$5 to \$8 per head as compared with the early autumn sales. Feed is very scarce.

According to a dispatch from Veterinary Surgeon Jones, of Ottawa, Ont., farmers in that vicinity are suffering heavy losses from hog cholera. The veterinary reports killing a number infected with the disease, and placing several farms under quarantine.

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CROSS-BREDS FOR MUTTON.

In a recent issue of the Australasian Pastoralists' Review appeared a communication from a sheepman, which we deem of sufficient interest to give our readers. It will be seen that the feeders of Australia hold views quite similar to those held by Americans regarding the value of certain breeds. The line of experiment suggested by the writer is one that could be taken up by our experiment stations with good results to the feeding industry. We cannot have too much information upon the points referred to, as it will tend to make the business less of an intricate problem, and enable feeders to follow well defined lines with a reasonable certainty as to result. The article referred to is as follows:

"Downs" and "Best Scotch" (Cheviots) are invariably at the top of London quotations, and that these are the breeds best adapted for the frozen meat trade is fully borne out by the publication already referred to. In the south of New Zealand Shropshires and Cheviots are year by year receiving increasing attention, and at the Invercargill ram sales, held on April 1, the Shropshires bred by Messrs. S. Reid & Sons sold readily at satisfactory prices, while trade for longwools was extremely bad.

The demand in England is for small, neat joints of fine-grained meat, with a large percentage of lean. In this respect Downs and Cheviots "fill the bill," and therefore sell readily at remunerative prices, while the grosser, heavier carcasses of the larger breeds are neglected. It is simply then a matter for each individual producer to consider whether it will pay better to have a big clip or get top price for whatever mutton he can produce.

Coming again to the matter of experimenting in breeding, it is surprising how few farmers really do anything systematically in this line. Many do experiment in a certain way, but mostly without system or that minute attention to details which is absolutely necessary before well defined conclusions can be arrived at. In some parts of New Zealand—South Otago, for instance—where climatic conditions vary little, there are many farmers who, with a little trouble, could in a small flock follow up different lines of crossing, and by keeping a record of length of keep, weight gained per week or month, returns of wool, mutton, etc., would be doing a signal service to the farming community, and at the same time be gaining valuable experience for their own future guidance. Taking, for instance, a flock of 120 ewes to start with—crossbred, with a strong dash of Merino blood in them—and divide into four lots, using on the several lots Romney, Lincoln, Border Leicester, and Shropshire rams. Let the treatment be good, without any undue forcing, and keep a strict account of details up till the realization of the entire produce. The financial results of an experiment of this kind could hardly fail to be satisfactory on the whole, and the publication of the various returns in wool and mutton percentage of dead to live weight, weekly or monthly gain, percentage of lambs fit for freezing, etc., would be most interesting reading, and would well deserve a careful study by those interested in the export trade. There are, doubtless, many forces to contend against before the New Zealand trade can be again put on a satisfactory basis, but the matter of quality producers have entirely in their own hands, and though irregular shipments, bad handling, etc., have much to answer for, it must be frankly admitted that to lack of quality may be attributed in no small degree the steady decline in value of New Zealand meat. But whatever may be said of other parts of the colony, it is abundantly evident that Southland producers generally have become fully awakened to this fact, and are, by a liberal infusion of Down and Cheviot blood, endeavoring to make up for past shortcomings.

Jayne's Expectorant isn't recommended to cure everything; but it does cure Bronchitis, Whooping Cough and Croup.

MOVEMENT OF SHEEP ON WESTERN RANGES.

From a bulletin issued by the National Live Stock Association on the movement of cattle and sheep on western ranges, we take the following regarding sheep:

"While the movement of sheep thus far has been rather lighter than last year up to this time, the decrease in the movement being about 10 to 15 per cent., flockmasters are feeling independent and holding prices pretty firm. In some sections the high prices have held the movement down to a very low point. Montana and Wyoming sheep have been moving very slowly. The high price asked for lambs has held many buyers back, but the movement has thus far been fairly good. Kansas and Nebraska promise to take fully as many as last year, and Missouri and Iowa are doubling last year's record. Colorado will not take to exceed 60 per cent of the number fed last year, because of the high prices asked. The demand thus far in New Mexico and Colorado has been remarkably active, but trades have hardly been as numerous as a year ago, though at an advance over last year's figures of fully 25 cents per head. The good prices being received for wool has made flockmasters rather indifferent and the large amount of rough feed in the corn states is said to be largely responsible for the increased demand from those sections. If present conditions continue, the number of lambs and sheep moved from western ranges this fall will fall fully 20 per cent below last fall's movement.

"The scarcity of cattle on the ranges of the West has made good grazing during the summer, and both sheep and lambs are coming out in better condition than usual. The expected demand from New England and eastern farms for stock sheep has not been as heavy as expected. Good ewes, both lambs and yearlings, are offered more freely than a year ago, though flockmasters still show a leaning towards keeping the breeding sheep on the range.

"Arizona, New Mexico and Texas report good ranges for the winter and conditions for a good winter are better than they have been in a long time, except in a few scattered localities. This fact is said to make sheepmen less anxious than usual, for with a fair winter the flockmaster can cut 50 to 75 cents worth of wool from his lamb in the spring and still get as much or more for the animal as this fall, with very little additional expense for carrying through.

"All through the range country the tendency is to stiff prices, but efforts to advance further are invariably followed by a dropping off in trading, while a drop in prices is followed by active markets and a livelier movement. Stockmen are all in good shape financially and nearly all sections report the utmost confidence in the situation and ability to meet the winter without fear, no matter how severe it may be."

FLOCKS AND FLEECES.

Feeding lambs of good quality are selling up to \$5 per hundred, a fact which shows the strong demand from farmers.

For the first time in a number of weeks the wool market begins to show some signs of activity. Values are very steady, but they are not as high as they should be. We hope for an advance within thirty days.

An attempt will be made to reorganize the New York wool exchange. Of course the Wool and Cotton Reporter is "agin" it, as a good market in New York is what that friend of the wool-grower might not want. It would make the wool-grower too independent.

An article credited to the Homestead, on the Merino sheep, is appearing in a number of agricultural papers. Here is a paragraph from it: "The demand is for a sheep with fewer wrinkles by the general American farmer, and a sheep that will produce twelve to eighteen pounds of wool and at the same time raise lambs that will sell well on the market and that will bear down on the scales." Think of ewes that will grow twelve to eighteen pounds of wool and raise good mutton lambs. The writer of the paragraph never saw a flock that would come near this record, and those that have come nearest it have always been wrinkly sheep. The editor had evidently been dreaming, and his idea of a

Merino is but the baseless fabric of a vision. Perhaps he never saw a flock of Merinos.

Sheepmen are coming to the conclusion that it is unnecessary to castrate male lambs that are to be marketed under a year old. The market does not object, and the work, risk and pain of castration may be avoided.—New York Farmer. We suggest that our contemporary look up the market reports before printing such an opinion. Bucky lambs always sell at a good discount. In reports of sales at the Buffalo yards the past week bucky lambs ruled 10@20c. lower than ewe and wether lambs of same quality. For instance, we note a sale of Michigan ewe and wether lambs, averaging 71 pounds, at \$5.40, and another bunch, from same state, averaging 73 pounds, partly bucky, at \$5.30. Only a part of last lot were bucky, yet the presence of a few castrated the whole lot to be discounted 10 cents per hundred. Those lambs were probably dropped in April, and are now about six months old. By the time they are two or three months older the discount will be much heavier. Yet the Farmer says it is unnecessary to castrate lambs that are to be sold under a year old. A bucky lamb 11 months old will not sell within 50 cents per hundred of a ewe or wether lamb of same age, weight or quality. There is no guess work about this—it is a well-established fact. The younger the lamb is castrated the better.

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THE FUTURE OF OUR CAVALRY.

The American Sportsman recently printed a long article on this subject, and deduced from its own arguments the statement that cavalry in the future will be a much more important branch of the army than ever before. The Sportsman says:

"We deny most emphatically that cavalry has lost its efficiency and force in battle by the improved firearms and long-range guns; although the long-range muskets have doubtless practically abolished bayonet charges.

"Captain Arthur H. Lee, of the British army, who writes the most satisfactory of the fight at El Caney in front of Santiago, says the want of cavalry cost our army hundreds of precious lives. Even had the rough riders of Col. Roosevelt been mounted on their horses, their loss would not have been one-third as fatal.

"In the old days of the war of the rebellion from 800 to 1,000 yards was a comparatively safe distance from the aim of the enemy's muskets. Now, 2,500 yards is not safe. Hence, to charge the line of the enemy in a line of rifle pits or under cover, some twenty-five minutes would be required for a line of infantry, while a cavalry line could cover the distance in ten minutes. Hence, an attacking force of infantry would be subjected to more than double the loss of a line of cavalry. But the difference is much greater than that. A line of infantry in compact column is an easy mark for the enemy, but a line of cavalry is a far more difficult target, and the moral and nervous effect of their swift and awful thundering is unnerving to the otherwise steady aim of attacked musketeers.

"Hence, we expect, and we have the highest military genius of the time in line with this expectation, that the cavalry branch of our service will be in much greater force than the infantry in the army of the immediate future."

The denial by the Sportsman amounts to nothing because it comes from a person without any experience. Capt. Lee was on the ground, and what he says is entitled to consideration; but from what we have gathered from reports and conversation with returned soldiers regarding the country around Santiago, its nearly impenetrable forests and impassable roads, we doubt if cavalry could have operated to advantage in the fight at El Caney. Think of a line of cavalry charging against a barb-wire fence, backed by infantry with Mauser rifles and machine guns. It would have been a fool-hardy man that would order such a charge. How would the horses have got through that fence? The men would have had to hack it to pieces with hatchets, and they could never do the enemy any harm until they could reach them with the saber. To do this they would have to get over the intrenchments. What an opportunity for the artillery and infantry to mow them down.

The fact is, cavalry will be just as necessary to an army as ever before—not more so, however. Horses will transport men more quickly than they can march, but the men will be armed with breech-loading carbines, and will fight on foot, except when a body of infantry in open ground shows signs of breaking up, and a charge is expected to finish the job. Against each other, bodies of cavalry will fight mounted where the country permits, but the greater efficiency of firearms will tend to make those in command dismount their men whenever conditions favor that style of fighting.

A reference to the records of the war of the rebellion will show that neither Sheridan nor Jeb Stuart, Custer or Fitzhugh Lee were foolish enough to attack a line of rifle pits with mounted men, except in one instance—that of Custer at Falling Waters. The result was the practical wiping out of one Michigan regiment, and it was not again attempted. Charging a line of breastworks with mounted cavalry where only the saber could be used, will never again be attempted by a commander who has had any experience in actual war. The theory about the time necessary to get over the ground is all right, but when the cavalry is coming every shot will tell, from artillery, rifles and machine guns. Those that would go over the heads of an infantry column will be just right to do execution on cavalry. Then with the wounded, riderless and dying horses breaking up the line, and the men feeling their impotence to accomplish anything until they get over those breastworks, lined with infantry, machine guns, and field pieces, we wouldn't be in such a charge for anything on earth. The cavalry would simply be annihilated. An infantry square would be equally as deadly.

The Sportsman's editor should study what cavalry has done in the past to get an idea of what it will do in the future.

For The Michigan Farmer.

RAISING HORSES.

Now that the bicycle is undoubtedly on the wane, and the true standing of the horse can be measured without prejudice, it is quite evident to all that there will be money in raising these animals for the future. The days of the horse's usefulness have not passed for good. On the contrary we will probably see a gradual revival of the animal's popularity, especially for pleasure driving. A great many disposed of their horses to take to wheeling because of the novelty of the fad, and they are now returning to their first love again.

There is a better demand now in the cities for good horses. Poor horses will never more be needed. Neither will small horses be needed. Moderate to large size horses are the best, and they should be raised either for their speed or strength. Weight and strength combined with slowness in draft horses will not do. Medium heavy-weight draft horses that have a brisk walk and a good trot, sell in any market for sums ranging from \$150 upward. This is an age of speed, and the slow business horse is ruled out. Well-matched pairs of horses that are good drivers, and crossed with French Coach horses, frequently sell for \$1,000 to \$1,200 per pair. Horses of this class are needed for private stables, and they must combine several good qualities—medium-weight, moderate speed, docility of temper, and good appearance in harness. Style and speed without too much mettle are the chief requirements.

Now horses can be raised from colts to three-year-olds for \$50, and horses sold at this age that have good blood will frequently sell for three to five times that amount. Colts have little demand and it does not pay to raise them for the market. One must figure upon holding them until a good marketable age. In New York a horse is not much good before it is six years of age. But horses intended for that market should be the cream of the herd, and they should be raised so as to come up to the three or four hundred dollar standard.

Besides horses mules are good animals to raise on the farm, and many farmers prefer to breed them to horses, finding as they claim more money in the work. The recent demand for mules by the United States Government for the Spanish war showed how few mules were really in existence in this country. Now there will be an increasing demand for mules for Porto Rico and Cuba in the next few years, and there will probably be more money than usual in this business. These certainly ought to be two good markets for our mules, for horses are not adapted to the climate of the islands, and it will be many years before electricity will invade them.

Ohio.

E. P. SMITH.

From Our Special English Correspondent.

THE INFLUENCE OF HEREDITY IN DISEASE.

Prof. Dewar recently gave in the Veterinarian an article under the above title, and the information which the writer conveys to the reader cannot prove to be otherwise than helpful to the veterinary surgeon, whose opinion on questions of causation of disease is often sought; and it will certainly be interesting, as well as instructive, to the stock owner to be made acquainted with the views of one of our advanced veterinary teachers, whose doctrines are likely to influence the opinions of coming veterinarians.

No subject has been more keenly discussed at meetings of veterinary societies and in veterinary literature than the one now before us; but there remain many points not yet removed from the region of debatable propositions. Indeed, Prof. Dewar suggests that the faith in the influence of heredity as a predisposing cause of disease is not so firm as it was some years ago. Advancing science has indisposed the scientific mind to accept anything in the absence of proof so positive that it cannot be questioned. Instead, the writer observes as looking on heredity as an important etiological factor in disease, that it is looked upon by many as a convenient term to use in getting out of a difficulty without confessing our ignorance. And it must

be allowed that the term may be used for such a purpose, but hardly by a scientist whose business it is to distinguish between specific causes of disease and constitutional tendency to disease—two things which differ very considerably.

The writer of the article states his conviction that heredity frequently exercises a powerful influence in the causation of disease. Proceeding to definition, and admitting the difficulty of formulating an absolutely accurate explanation of the term, it is suggested that heredity may be understood to be that property by which qualities and characteristics are transmitted from parent to offspring.

It is quite true that recent discoveries in bacteriology have led, and are still leading, to the impression that all diseases are associated with specific organisms, on the presence of which the disease depends. It must not, however, be forgotten that the spores of disease-producing organisms require a favorable soil for their growth, that they do not all grow under exactly the same conditions; on the contrary, that some of them flourish under circumstances which absolutely kill others. However correct it may be to say, in the light of Dr. Koch's discovery of the tubercle bacillus, that in the absence of the bacillus consumption cannot occur, it is equally true to assert that consumption will not be developed, even when the bacillus of tubercle is present in the system, unless there is something in the organ attacked which is favorable to the growth of the microbe, and all that Prof. Dewar claims for heredity is the transmission of this favorable condition of system or receptivity or predisposition, in the absence of which the specific cause of disease is, in many cases, comparatively powerless to act.

In one part of his essay the writer remarks that it is concerning diseases connected with osseous tissue, such diseases as splints, spavins, ringbones and sidebones, that the greatest diversity of opinion appears to exist in reference to their hereditary character, and he goes on to show that, while it is undoubtedly the case that shock or concussion, and external violence are among the most common producers of disease of bone, they are not the only causes; that another very important factor in their development is the conformation of the animal. Round bones, curby hocks, and short, upright pasterns, all of which are distinctly hereditary characteristics, are of the utmost importance in the development of disease.

In regard to splints particularly, they are so constant in animals that are put to work on hard roads that very few horses attain the adult period without showing some trace of them, and it seems quite natural to argue that they are the simple result of work under particular conditions; but it is pointed out that even in young colts splints are sometimes developed, and in such cases it cannot be urged that concussion on hard roads has anything to do with their appearance. On the contrary, they appear to be the result of a natural attempt to strengthen the imperfectly developed bony structures by throwing out new bony material which may at first be in excess, but is subsequently consolidated and contracted, so that the apparently unnecessary additional matter is removed.

The heredity in such case seems to be exhibited in the failure of the bones to support the animal's weight without certain additions of new hard material to act as a temporary stay or support—a condition of things which the term splint itself seems to imply. Referring to spavins, the same argument is applied, while it is allowed that even the best formed hocks are subject to the disease from accidental causes. Ringbones, sidebones, curbs and windgalls are quoted as instances of disease which are largely due to peculiarity of conformation, about the hereditary character of which there can be no question. With regard to roaring and other nervous affections, their hereditary character is taken as an accepted fact.

Yorks.

AGRICOLA.

HORSE GOSSIP.

Badenheimer, the Brooklyn handler of first-class draft horses, last week bought a load of prime drafters at Indianapolis. He paid up to \$240 a horse for the best of his lot.

A three parts bred Percheron geld-

ing, five years old and weighing just about the level ton, was recently sold on the Chicago market for \$337.50. He was taken on export account.

Ralph Wilkes, 2:06½, only got 34 living foals, and 11 of them are in the list. He would have proved a great sire had he not been campaigned until he dropped dead on the track.

Directum, 2:05½, has been sold to W. E. Spiers, of Glen Falls, N. Y., for \$20,000. He made his record as a four-year-old, and is now eight. He was sired by Director, dam Stemmwinden by Venture.

At the recent Lexington, Ky., sales 193 head of horses, old and young, were sold for a total of \$57,715, an average of a fraction over \$299. The averages at public sales are steadily increasing.

No former season ever produced such a galaxy of fast trotters as Bingen, 2:06¾; Eagle Flanagan, 2:07½; Caid, 2:07½; John Nolan, 2:08; The Abbott, 2:08; Nico, 2:09¼; Pilatus, 2:09¼; Who Is It, 3, 2:12, and the Merchant, 2, 2:20.

John Jacob Astor, who has just been discharged from the U. S. army, recently paid \$2,000 for a Kentucky-bred saddle-gelding which he saw at the Illinois State Fair. A beautiful well trained animal always brings a good round price.

John McGinnis, Davenport, Iowa, recently sold a lot of drafters on the Chicago market at auction. One sold for \$300, and a lot of seven other Percheron bred ones, weighing from 1,600 to 1,800 pounds, brought a lump sum of \$1,225.

St. Gatien, a high class thoroughbred, has been sold in England for shipment to America. The price paid was \$7,500. A couple of weeks ago one of his sons, imp. Meddler, was sold at auction and went to Wm. C. Whitney, ex-Secretary of the Navy, for \$49,000. Mr. Whitney will hereafter breed as well as race thoroughbreds.

Ornament, the great four-year-old, will not race any more. He will be placed in the stud near Lexington, Ky., where he was foaled. Ornament was undoubtedly the best three-year-old in training last year. His breeding is excellent, his sire being imp. Order, and his dam Victorine, by imp. Rayon d'Or. Imp. Order is proving a good sire.

Miller & Company, exporting to London, England, recently purchased from F. Ballinger, Genoa, Ill., a five-year-old brown draft gelding, got by an imported Percheron stallion from a Shire grade mare, for \$337.50. At the same time Mr. Ballinger sold a stylish high-stepping gelding to Remi Dejonckheere, for export to Belgium, for \$215.

The best "load" of drafters that has been sold at auction for some weeks at the Union Stock Yards, Chicago, was brought there by Charles Dane, Lanark, Ill. They were mostly grade Percherons, specially fed for the market, and weighed up to 1,940 pounds. The competition between local and export buyers was very keen, prices ranging from \$175 to \$275, and the average for the entire lot falling at \$217.50 per head.

The great Herbst Prize, worth \$1,500 to the winner, was trotted for at Vienna, Austria, lately. It is mile heats, best two in three, and was won by Que Allen in 2:12¾, 2:12¾, the fastest two consecutive heats ever won by a trotter in Europe. Abnet was second, Robbie P. third and Bismarck fourth. Que Allen won \$1,500; Abnet, \$650; Senator A., \$250; Bismarck, \$125. Abnet trotted the first heat in 2:13¾, which is her best European performance. Colonel Kuser was disqualified for running. The result of this race leaves Que Allen champion of Europe.



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Grange Department.

Our Motto:—"The farmer is of more consequence than the farm, and should be first improved."

Address all correspondence for this department to

KENYON L. BUTTERFIELD,
AGRICULTURAL COLLEGE, - - MICH.

News from Michigan Granges is especially solicited.

GRANGE CALENDAR.

Lowell District Council, with South Lowell Grange, Nov. 17.
Gratiot Co. Pomona, with Bethany Grange, Nov. 26.

THE EDITORIAL TABLE.

An Apology.

We wish to apologize to several correspondents for not inserting Grange news this week. Everything has been subordinated to the letters upon constitutional revision which, to be of value, must appear now. We also have several valuable articles awaiting space.

The November Topic.

The November topic for discussion is "The Government of the United States." We have not room this week to publish Bro. Messer's comments on this topic, but they will appear later. Meantime we trust that Lecturers will not fail to provide for the discussion of this topic before the month is over.

The October Topic.

What have the Subordinate Granges decided regarding the October questions?

1. How can township government be improved?
2. How can county government be improved?
3. How can State government be improved?

Let us hear from correspondents on these themes.

AN IMPORTANT QUESTION.

Shall the Constitution of the State of Michigan Be Revised?

At the approaching election, November 8, the voters of the State will be called upon to vote on the important question stated above. As an aid to all readers of this department in deciding their course, we have asked a number of the leading Patrons of the State for an expression of opinion on this question, and their reasons therefor. The following letters were received in reply. Our readers will observe that there is difference of opinion, for which fact we are glad. We hope the letters may be helpful in securing an intelligent vote on the question.

Paw Paw, Mich., Oct. 13, 1898.
I believe in constitutional revision; if for no other reason so that justice may be done the Michigan Central railroad in the matter of passenger fare rates.
JASON WOODMAN.

Berrien Center, Oct. 8, 1898.
My opinion is that the constitution was framed when the country was new, and perhaps answered the purpose at that early date. But the State has improved so rapidly, and the varied development all along the line of improvement demands radical improvements in the constitution to make it conform to the wants of our advancement. Our State salaries want revising, and many other provisions should be revised; in short, the whole thing has become a fossil.
THOMAS MARS.

Fremont, Mich., Oct. 10, 1898.
I think the constitution of the State should be revised. First, it was written when the State was undeveloped, and we have grown beyond its limits and provisions. Second, it is too wordy and complicated for the average mind to comprehend. A multiplication of words does not make a constitution. Yes, I think it should be revised, much of it stricken out, and much added in the fewest possible words. In short, we want a constitution that meets the requirements of the State—the present one does not.
GEORGE E. HILTON.

Ypsilanti, Oct. 13, 1898.
The fundamental law of the land should only be changed after the most careful and elaborate consideration, and then only upon important occasions and for clearly necessary objects. So far, I have seen but two reasons

urged in favor of revision of our State constitution: First, that most other states have revised theirs since ours was adopted. Second, some good men think the salaries of the State officers are too small. The first is not worth considering. The second can be met by an amendment.

Since the adoption of the constitution of 1850, now in force, there has been submitted to the people, first, the constitution as revised by the convention of 1867; this was rejected by a majority of 39,000. Second, the constitution as revised by a commission appointed by the governor, submitted to the people in 1874, and rejected by a majority of 89,000.

Of the amendments to the present constitution submitted to the people, nearly one-half have been rejected, showing a conservative spirit and satisfaction with present conditions.

With the experience of the past before us, with our rights fairly well protected by our present constitution, and no urgent call from anyone for a revision, I would say, vote it down.
JOHN A. McDOUGALL.

Grand Rapids, Oct. 12, 1898.

I know there are some inconsistencies, and some, perhaps, antiquated and out-of-date provisions in our constitution, but taken altogether it is very doubtful if a revision would make it much better. On the whole, I do not favor it. The expense would be considerable to begin with, but nothing compared with the uncertainty and unsettled condition in which we would be left. As matters now stand we have judicial decisions from our highest courts on almost every conceivable question concerning the constitution. Year by year business in the courts is growing less. Should a revision take place we would be obliged to go over the whole ground again. I believe it would be a very good thing for the lawyers, a source of much trouble for the business interests, entirely uncalled for so far as the farmer is concerned, and in the end a very great expense for all to bear.
R. D. GRAHAM.

Coldwater, Oct. 10, 1898.

That there are defects in the present organic law but few will question. But the experience of the past has taught us that it is idle to hold a convention, no matter how formed, to submit a revision to the people of the State. The truth is, the constitution of 1850 is, in many respects, a good one, and the people cling to it with great tenacity. At the close of the civil war our very civilization was changing, and there seemed to be unusual reasons why a convention should be held to remodel our own constitution. A hundred good men were selected to do this work. These men labored diligently one hundred days and submitted the result of their toil to the voters of the State. The instrument looked well on its face, but it was buried by an adverse majority of forty thousand.

In 1873 an act was passed authorizing the governor to appoint a commission to revise the constitution by eliminating its defects and substituting something good and strong instead. By virtue of the authority thus given, Gov. Bagley proceeded to appoint eighteen of the ablest men in the State of Michigan. They performed the task assigned them, and the constitution thus revised was submitted to the people on the 3d of November, 1874. But it was defeated by a majority of more than 85,000.

The question of holding a convention has since been negated by the people, but if in a thoughtless hour the people should vote for holding another convention, there is not one chance in a hundred that the result submitted will be ratified by the people.
CYRUS G. LUCE.

Paw Paw, Oct. 17, 1898.

I am heartily in favor of the revision of the constitution, but it seems an almost hopeless effort to have such an important matter as this receive the attention it merits. In 1892 the question was submitted to the people and only 33,193 electors thought it of sufficient moment to vote upon, and a majority of 703 is recorded in favor of such action. At present I think the following reasons sufficient to have a new constitution, were there no others—and there are many:

In the year 1850, when the present constitution was adopted, the cities of the State having a population of 20,000 or over were few in number and local government was easily maintained; but now, owing to the many financial

interests involved, the legislature is besieged and many members, having little personal knowledge of the wished-for legislation, are liable to cast their votes without that intelligence every conscientious member exercises, and a great wrong may thus be fastened upon a municipality. Besides the legislative session is prolonged many weeks beyond the time necessary to properly transact the State business. Then again, in 1850 we had but three State institutions as against twenty, the number under State control at present. This is an example of the different branches of government the present constitution has to provide for. At that time corporations were few and combinations of capital under their guidance were small as compared with the amounts under their management and control at the present time. Franchises were of small value and were not thought of sufficient importance to be mentioned at all. Street railway and kindred corporations were almost unknown. Now millions of capital is interested in their business. But I will stop, for the list would be a long one, and enough has been cited to show the need of a new constitution, and should the electors decide in its favor I sincerely hope the State Grange will be active and wide awake as to the manner in which the members of the constitutional convention are chosen.
E. A. WILDEY.

Union City, Oct. 16, 1898.

We are on the eve of another election, and the question of the revision of the constitution of Michigan is to be submitted. Is it wisdom to revise, or is it better to dispose of it by amendments? It is a fact that we have outgrown the constitution that we adopted in 1850. In 1867 a constitutional convention was called to revise, but when submitted to the people they failed to ratify it. Again in 1873 a commission assembled and a new constitution was framed, but was vetoed by the people at the next election. In the light of these facts is it wisdom to again assemble a convention, which costs thousands of dollars, to thresh over old straw? I answer most emphatically, No. Better go on amending, as we have from time to time, until we get the old constitution perfected. Thirty-four amendments have already been adopted and I believe many more will soon follow. Among those I believe essential are: First, that the word male should be eliminated from Article 7, Sec. 1, so that every woman can vote at all elections; second, that contested elections should be settled by a commission before the legislature meets; then every man would be in his seat at the convening of the session ready to do business; this would have a tendency to shorten the session; third, the attorney-general should have a sufficient salary and reside at Lansing; this amendment alone would save thousands of dollars to the taxpayers of the State; fourth, the upper peninsula members receive five dollars per day and mileage and the lower peninsula members receive three dollars per day and mileage; I believe their salaries should be uniform; fifth, the time is not far distant when the dairy and food commissioner will be made elective. There are other amendments which are desirable and I sincerely hope that each Grange will look to it and have these propositions submitted at the next spring election.
D. D. BUELL.

Ypsilanti, Oct. 15, 1898.

It needs no argument to prove the value or necessity of a constitution, for as has been justly said, "The absence of a written constitution is a direct encouragement to rash governmental experiments. A law paramount, drawn by picked men assembling for the purpose at stated intervals all the primary social rights against popular passion or impulse or legislative corruption, and interpreted by the courts, is a device peculiar to the United States. It is the only real valid check on democracy ever devised. "The term constitution may be defined as the body of rules and maxims in accordance with which the powers of sovereignty are habitually exercised. A constitution is valuable in proportion as it is suited to the circumstances, desires and aspirations of the people, and as it contains within itself the elements of stability, permanence, and security, against disorder and revolution. * * * In America the leading principle of constitutional

liberty has from the first been that the sovereignty reposed in the people; and as the people could not in their collective capacity exercise the powers of government, a written constitution was by general consent agreed on in each of the states. The weaknesses of a written constitution are that it establishes rules which when found inconvenient are difficult of change. But being a necessity in America the attendant evils are insignificant as compared with the inestimable benefits."

One of the great laws of life is progress. And in recognition of this fact the framers of our present State constitution made provision that in 1866, and each sixteenth year thereafter, the question of the general revision of the constitution shall be submitted to the electors; and in case a majority shall decide in favor of a convention for such purpose, the legislature shall provide by law for the election of delegates to such convention.

I think that the necessities of the situation not only warrant but demand a revision at this time.
ANDREW CAMPBELL.

Palmyra, Oct. 18, 1898.

I will vote against revision. Am in favor of certain amendments, but prefer to have them submitted separately to the people for ratification. Would be in favor of a general revision if legislators were not too frequently persuaded to vote against their better judgment. A revision would probably ask to have certain powers granted to this legislature, such as fixing salaries and other matters, which now rest with the people. When our constitution was framed I think the committee on revision had the general welfare of the people of Michigan more at heart than a committee of revision might at the present time.
M. T. COLE.

Fruit Ridge, Oct. 15, 1898.

Article 20, Section 2, of the State constitution, makes it compulsory for the submission to the people every sixteen years of the question of constitutional revision. In accordance with this mandate every legal voter in Michigan will, at the coming election, have the privilege of voting yes or no on the proposition. The constitution further provides that if a majority of the votes cast on the proposition favors a convention for such purpose, the legislature at the next session shall provide by law for the election of delegates to represent the different parts of the State in said convention. Before a revised constitution can become operative it must be submitted to and be ratified by the people of the State. The constitution now in force is that which was revised and ratified in 1850. In the years 1867 and 1873 revisions of the constitution were ordered by the voters of the State, but the work of the respective conventions were unsatisfactory to the people and both revisions were rejected at the polls.

The constitution by which we are now governed was made to answer the interests and demands of the State almost fifty years ago, when the whole State, comparatively speaking, was in an unsettled and undeveloped condition. The results of progressive civilization which we now see on every hand all over our State existed at that time in imagination only. The people were then bidding for and encouraging all kinds of public enterprises that would assist in opening up and bringing into use and helpfulness all the natural resources of the State. With these ideas then in view, special privileges were given promoters of railroads, mining and other corporate interests, and in a general way the constitution was planned for the conditions that then prevailed.

But fifty years have come and gone and during that time a wonderful transformation has taken place and Michigan of to-day in all its general wants and demands is radically different from the Michigan of fifty years ago. The State is now fully developed up to and stands more than a peer with many other states of our Union which unitedly make up one of the world's proudest and most progressive nations. The unprecedented forward march of our country with Michigan included is attributed to the energy, industry and general intelligence of the mass of the people. And they are the same people who should now and always maintain that equity and justice between and for the people of the State in all respects as well as carry out the true designs of a republican form of government.

Does the present constitution of our

State properly answer the requirements of Michigan to-day? Briefly stated, we will answer no; not in all respects. In some essentials the State has outgrown and is now developed past the power of the constitution to govern it and maintain equity and justice between and for all the people. The special favors given to corporations should not be given longer, for the objects of giving them are now fully attained by the State, and under such circumstances it but adds injury to injustice. The special standing privileges offered fifty years ago to such promoters as were then considered servants of the people may now aid these same promoters to become our masters and successfully seek to control the people of the State to their special advantage and unjustifiable pecuniary gain. In this connection all provisions for specific taxes based on earnings should be eliminated from the State constitution. All taxable property, whether considered individually or collectively in form of corporations, in answer to justice, should now be taxed on the same and equal basis for the maintenance of all our public institutions and the payment of the public expense.

Inasmuch as a very large majority of the people of the State demand economy in the administration of public affairs, thirty days of legislative session may be saved, with accompanying expense to the State, by changing the constitution so as to limit the time for the introduction of bills to thirty days instead of fifty, as now provided; or, upon consideration it might be thought best to pay legislators a fixed salary for their services at each regular session.

It will save considerable money to the State if Section 1 of Article 4 be so amended as to fix a severe penalty for its violation in voting extra compensation to officials, etc. Now that the Agricultural College has passed the doubtful state in its existence, Section 11 of Article 13 should be so amended as to make it impossible for the College to be attached to the University of Michigan, as the section now says that it may. This provision has at times led the friends of the Agricultural College to believe that the University managers used influence to withhold support from the Agricultural College to the end that it may be crippled and finally become attached to the University. Whether such pleas were well-founded or not, this provision in the constitution is a constant menace to the independent maintenance of the Agricultural College and can be used against its best interests by designing men.

Inasmuch as it has come to pass that the legislation of the State may and is liable to be persuaded by the numerous and ingenious lobbyist who so persistently presses his case upon the attention of each individual legislator to pass bills often not in the interest of the people or the best interests of the State, it may now be well to consider, as a protection against the giving of such special privileges and class legislation, the question of referring all general laws back to the people for ratification and receiving their approval before they can become operative. The justice of this principle is recognized by the adoption of the constitution itself and by constitutional provision for the reference of general banking and other laws. This proposition seems to have every justifiable argument on its side.

Section 2 of Article 15 will read about right if amended by striking out the word "banking," thus making it apply to all general laws.

Under the head of "Exemptions" and "Miscellaneous Provisions," good reasons can be given for asking changes, to the end that these parts of the constitution may be brought up to date.

No doubt but a thorough revision of the constitution of our State is in line with the maintenance of equity and justice between all interests and people which should be and is the chief object of constitutions and governmental forms.

It must be admitted that there are dangers attached to the opening up of the constitution to change, but with due care in selecting those who make up the revising convention the broadest conservatism and patriotism will mark the whole work. Then the people must finally approve of the revision by vote before the new constitution can go into effect. If the people each and all do their duty no fears need be entertained in this particular.

The expense of a constitutional convention may, but should not, lead people to vote against the proposition, for it is much better to bear all at once the expense of remedial legislation than to bear expensive discrimination or wrongs for continuous and perpetual years to come. If the constitution adopted fifty years ago, when the State was new, to meet the then existing wants of the State does not meet the needs of the State and the people in an advanced condition of development, then all people should be fearless in exercising that patriotism which will lead them to vote "Yes" on constitutional revision.

GEORGE B. HORTON.

Kalkaska, Oct. 14, 1898.

I am of the opinion that it would be best to have a revision. The original constitution evidently contemplated that such revision would be at some time necessary, in that it provided that the question of revision should be submitted to the people at least once in sixteen years. It is now forty-eight years since our present constitution was drafted; there have been many changes in that time; as a State, we have in some respects outgrown many of the provisions of the constitution of 1850. Some of these ill-fitting provisions have been changed to suit our different conditions by sundry amendments, and many of these proposed amendments have been defeated by the people at the polls through ultra conservatism, preferring to suffer an evil rather than permit a change.

These amendments are becoming more and more numerous as the years go by, which of itself is an indication that the constitution of 1850 does not in many respects suit our present condition as a people. It seems to me to be wisdom and economy to make necessary changes at once rather than to be making constant patchwork.

It is hardly necessary to refer to the fact that the constitution of 1850 is farther removed from the common people than that of 1900 would be, such has been the change of conditions within the last fifty years. Nor do I think there are any chances taken in submitting a revision to a convention of the people, as it must of necessity be ratified or rejected at the polls at the general election of 1900.

A. E. PALMER.

Lansing, Oct. 14, 1898.

I would say that in 1867 a general revision was made by a convention that numbered among its members Charles M. Crowell, James Birney, Cyrus G. Luce, George Willard, Sumner Howard, DeWitt C. Leach, John W. Longyear, Eugene Pringle, Solomon L. Withey, Edwin B. Winans, Josiah Turner, Robert McClelland and George V. N. Lothrop. The constitution submitted to the people by this convention went down by the decisive vote of 71,733 yeas to 110,582 nays, or an adverse majority of nearly 39,000. The convention cost the people \$74,338.75.

A revision was made in 1873 by a commission appointed by the governor, two members from each congressional district. Among its members were E. W. Meddagh, Ashley Pond, Edwin Willits, Hezekiah G. Wells, Solomon L. Withey, David H. Jerome and Seth C. Moffat. The constitution framed by this commission was submitted to the people Nov. 3, 1874, and rejected by a vote of 39,285 yeas to 124,034 nays, an adverse majority of 84,749. The number of "nays" was more than three times the "yeas."

No abler men, nor larger percentage of able men, can now be found who will consent to leave their private business and assist in the work of revision than did so in 1867 and 1873.

The present constitution provides for its own amendment. It is only necessary that a joint resolution shall pass, by a two-thirds vote, both branches of the legislature and be approved by a majority vote of the people. In this way upwards of thirty amendments have been adopted.

Is there any reason to suppose that a general revision will now fare any better at the hands of the people than in the past? May it not be that the instrument as it now is, is satisfactory to the people? Who knows that it is not? If anyone thinks it can be improved, let him propose an amendment and the people will soon record their judgment. The method is simple and inexpensive.

It is not difficult to see why a revised constitution is sure of rejection, while an amendment may carry. The former is, perhaps of necessity, omnibus in

character. Many provisions are crowded into it that do not meet general approval. A majority of the voters reject it, though each one voting in the negative may, and quite likely does, by so doing, reject some provisions he would like to approve. The voter prefers to lose the one provision he likes rather than accept a dozen others he does not like, and he is unquestionably wise in his preference.

The amendment, on the other hand, permits each and every voter to express himself squarely for or against each proposition.

The constitution can be "revised" by amendments, one at a time, and if we may judge by the past, it can be revised in no other way.

A convention for revision will now cost hardly less than one hundred thousand dollars, which is a large sum to be expended in the preparation of an instrument sure to be rejected. Obviously a convention for revision of the constitution should not be authorized.

ROBERT L. HEWITT.

Veterinary Department.

CONDUCTED BY DR. W. C. FAIR

Advice through this department is free to our subscribers. Each communication should state history and symptoms of the case fully, also name and address of the writer. The initials will only be given. When an answer is requested by mail it becomes private practice, and a fee of one dollar must accompany the letter.

Stocking—Question.—In a late number of your paper you prescribe for stocking. How long should that treatment be kept up, and in your opinion are sugar beets and mangels a good feed for horses? S. D. P., Hillsdale, Mich.—Continue the treatment until the horse recovers. Yes, sugar beets and mangels are good for horses if fed in small quantities.

Eczema.—My May lambs broke out in June with sores on hips and body. Sores are dry and rough. They gnaw themselves wherever they can reach the sores. I dipped them in zenoleum last July. Have also applied tar. M. H., Addison, Mich.—You should have used zenoleum one part and water fifty parts once a day until they were well.

Cow gives bloody milk.—Cow has given bloody milk for some time. C. H., Sand Beach, Mich.—Your cow has bruised her udder. Give her more bedding if you stable her. Foment the udder twice a day with hot water if it is hot and tender. If not it will not be necessary. Use a milking tube. Try to ascertain the cause and remove it.

Rheumatic gout.—Ten pigs have bunched on legs. Kept them in pen for a short time and they got no better. Then turned them out. Have been fed slop and milk from the house. They are sore and lame. B. A. F., Mancelona, Mich.—Pigs have a rheumatic attack. Give small doses of salicylate soda in feed and apply tincture iodine once a day to bunched.

Fibrous tumor.—Horse has hard bunch on breast and shoulder the size of a goose egg. Collar rubs it, therefore I cannot work him. Same horse has a breaking out on lower part of body. H. M. Q., Hamburg, Mich.—The bunch can never be dissolved by medicine. Have it cut out and he will soon get well. Apply vaseline and oxide zinc, one part zinc to five parts vaseline, twice a day.

Wound on Coronet.—June last I purchased a span of horses; one of them had calked himself some time in March. Called a veterinarian and we burned off proud flesh. Took good care of wound. It still discharges and I have been unable to heal it. C. L. C., Ellsworth, Mich.—Burn fungus with hot iron and apply equal parts calomel, oxide zinc and tannic acid three times a day. You must keep fungus burned down as low as skin on both edges.

Surfeit.—Mare 12 years old has not been well for four years. Four years ago she began breaking out with pimples about the size of a pea, which seemed to put her in torment. First appearance is a little lump, and on biting them they open, form a hard scab, and remain so for several months. Her neck and legs seem the worst. Her urine is nearly white, thick and stringy. About three months ago she began going lame in right hind leg, the leg being swollen just enough to notice. She was turned on pasture for exercise. Next morning she was sore and stiff. Soreness continued about a week. At present she shows

no signs of ailment, except the pimples, urine and swollen hind leg. Shows no lameness when walking. Has good appetite. Have been doctoring for farcy. G. W. C., North Star, Mich.—Give one dram iodide potash three times a day for one week, then give one dram Fowler's solution twice a day; also give one full teaspoonful nitrate potash every evening in feed. Wash body with soap and water; add some kerosene.

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" Sprains
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Horticultural.

For The Michigan Farmer.
STRAYING FOR THE CURL LEAF.

It has long been known that this disease is of a fungous nature, and experiments conducted each year since 1892, long ago satisfied the writer that it could be controlled by the use of fungicides. While this was denied by many fruit-growers, the belief was shared by others who had experimented to their satisfaction. In the case of nearly all fungous diseases, the recommendation has been to spray the trees in the spring just before growth starts, and at first this was thought to give good results against the curl leaf, but after careful experiments it became evident that better results could be secured from applications made quite early in the spring, than from those used just as the buds are starting.

In the spring of 1898, a large number of trees were sprayed in various parts of Michigan during the month of March, and where the work was thoroughly done the trees showed little or no trace of the disease, even in case of varieties like Elberta and Capt. Ede, which, when unsprayed, lost practically all of their foliage, and this resulted in the saving of the crop. Others delayed their spraying until the buds were opening and, although some benefit could be detected, many of the leaves were destroyed and the crop seriously injured. It should be noted that the disease appeared much earlier than is generally the case, as when the buds first opened the disease was noticeable. Fully as good results have been secured from spraying in the fall after the leaves have fallen, as from the early spraying in the spring, and from the fact that the weather in the spring, during the month of March and early April is often unfavorable for spraying, as well as because the work is more pressing than in the fall, many fruit-growers are planning to spray their peach orchards in November. When left until spring, something frequently prevents the carrying out of the plan, and as a rule there is more opportunity for spraying in the fall, and if prevented from doing it at that time there will still be a chance for doing it in the spring.

As a result of a large number of experiments, it is recommended to spray the trees while in a dormant condition, and before the first of April, if possible, with a solution of copper sulphate, at the rate of one pound in twenty-five gallons of water. This should be applied so thoroughly as to wet every part of the tree, as if any of the twigs or buds are not soaked by the spraying solution, the leaves that grow from them will very likely be attacked by the disease, if the weather in the spring is favorable for its development. The past season one application gave fully as good results as when Bordeaux mixture was later applied, but when the disease does not appear until some days after the buds have opened, and when its duration is prolonged, it is probable that a spraying of Bordeaux mixture within a week after the blossoms have fallen will have a beneficial effect against the spreading of the disease, as well as to lessen the injury from the curculio, and from the brown rot, and the various spot diseases by which the fruit is attacked. From lack of spraying it is probable that fully nine-tenths of the crop of Elberta peaches were destroyed by curl leaf the past season, but in a large number of instances where the owners sprayed their trees as recommended above, they secured a good crop of fine peaches, for which a large price was obtained. We would urge all peach-growers who have this or other varieties that are subject to attack, and who have any question as to the efficacy of spraying, to interview persons in their vicinity who have given it a fair trial. Under ordinary conditions a solution of copper sulphate as recommended for the fall spraying will give fully as good results against the curl leaf as would the use of Bordeaux mixture, but some have claimed an additional value from the latter material when prepared with a large amount of lime and used so thoroughly as to give the trees a white-washed appearance, from the fact that the branches of the trees will be less affected by extremes of temperature, and the buds will be less likely to start during warm periods in the winter

than when unsprayed. As Bordeaux mixture is more expensive and more difficult to apply than copper sulphate solution, we do not recommend its use while the trees are dormant, except upon varieties like Crawford Early, and others that are tender in bud, and when grown upon the South or Southwestern slope. Under such conditions its use might be found advisable, as even though a number of years might pass without any benefit being noted from it, a single crop thus saved would several times repay the cost of the application. To be effectual in preventing the swelling of the buds, the application should be repeated at intervals during the winter, when the lime becomes washed from the trees so as to show the dark colored bark beneath.

L. R. TAFT.
Agricultural College, Mich., Oct. 26, 1898.

For The Michigan Farmer.
MY PLAN OF TRUCK FARMING.

I have thought best in this article to give your readers a sketch of my general plan of truck farming; then in other articles I can describe my methods of growing my crops more in detail.

My specialties on my village farm are strawberries, celery, cabbages and cauliflower, and poultry. I grow other fruits and vegetables in smaller quantities, but the first named are my principle money crops. I began growing garden crops 20 years ago, when living on my father's farm. After I had acquired some experience I enlarged my garden and sold the produce in the village near by. I was quite successful, and after a few years I bought my little farm in the village where I now live. The place contains about three acres, two of which are used for gardening, and the other acre is occupied by the residence, barn and poultry yards. I keep a horse and cow, one or two pigs, bees and poultry. When I first began I did the most of the work myself, but now I hire help to do the most of the work in the market garden, and give the most of my time to caring for the poultry and other live stock on the place, and working in my experiment garden. As to my success in market gardening, I have made a living for my family and money enough to pay for my farm, buildings, and irrigation plant. The methods of culture, and the rotation of crops which I have practiced in the garden I will describe as follows:

Every spring I set one-half acre of strawberries, or one-fourth of the garden. These are run two years, and immediately after the last picking, or early in July, the plants are plowed under, and the ground set to winter celery. The next year the same ground is set to early celery, and the next year to strawberries again. Cabbages and cauliflowers are grown between the strawberry rows during the first year while growing the plants. This plan gives me each year, one acre of strawberries, one acre of celery, and one-half acre of cabbages and cauliflowers. The greater part of the stable manure is used as a mulch for the strawberries, and the manure used in this way for two succeeding years makes the soil rich enough for the celery which follows. The celery is grown by a modification of the plan known as the "new celery culture," and it is irrigated from a brook near by, for irrigation is indispensable in a plan of close planting. The early celery is blanched with boards and the winter celery is blanched in the cellar, or in trenches out of doors, and marketed during the winter. I have quite a large trade in plants, especially celery plants, and sometimes I do quite a business in forcing lettuce and radishes for the early market. A few grapes, raspberries and currants are grown, from which a small income is obtained.

I began a few years ago to keep hens. My flock has been gradually increasing and a large henery has been built. I try to give the hens good care, and I have made them fairly profitable, and the hen manure saves me some money in buying fertilizers. In addition to the hen manure and that from the horse, cow and pig, I usually buy about 50 tons of manure every year. As I have but little land in grass, the food for these animals must be mostly purchased, but I think it pays me to keep them, for they consume the waste from the garden, and save me buying a good deal of manure. Two men are required to do the work during the summer, as the greater part of the produce is sold from the

market wagon. I am within one to two hours' drive of four large villages, and in these I find a market for my produce. I usually grow 40,000 bunches of celery, 200 bushels of strawberries, and 5,000 cabbages and cauliflowers. In the last two or three years I have had to meet more competition, as other people saw that I was making some money and are now growing garden truck. I am compelled to grow articles of the best quality to hold my trade. In this business, as in other vocations, it is only the experienced and skillful workman, and one who is a hustler, that "gets there." If one can grow fancy strawberries, celery, etc., he gets out of the general competition on the lower grades of produce.

In most of the large villages there are wealthy or fashionable people who are willing to pay good prices for fruits and vegetables if they can depend on getting a good article. I think I owe a part of my success to irrigation, especially in strawberry and celery culture. The large varieties of strawberries always bring a fancy price when grown in narrow rows and irrigated. People are willing to pay for water when it goes into these crops, and the more you can get into them the larger the profit. It is usually the attractive appearance that induces people to buy. There is less competition on those crops which are the most difficult to grow, and the skill required to grow them is what hinders their overproduction.

My advice to the amateur in market gardening is to go slow until he has learned what his market demands, and how to grow produce so as to leave him a margin of profit. There are many things about gardening that can be learned only by years of experience in the work.

Delaware Co., N. Y. W. H. JENKINS.

For The Michigan Farmer.

FRUIT NOT MATURING.

The failure of many fruits to mature this summer has caused considerable annoyance and loss to farmers. Peach trees are more apt to produce flowers, and fail to have the fruit set, than most other orchard trees. The fruits that fall off when one-third or one-half grown are a total loss. Early in the season the trees give every assurance of producing an unusual crop of fruit and it is decidedly disagreeable to the owner to see his hopes disappointed as the season advances. This often happens, too, when the trees are carefully sprayed, and are apparently free from insects and disease.

Now a good deal of this trouble can be blamed to the imperfect fertilization of the flowers. If the pollen does not reach the pistil of the blossoms at all no fruit will set, and if it only imperfectly reaches it, or at the wrong time, the fruits may set, but they will drop off when half developed. This is probably one of the most general causes of the fruit failures early in the season in orchards that are kept scrupulously free from insects and diseases.

In an ordinary good season, when the conditions are all favorable, the blossoms will be perfectly fertilized, but there are many little things that will interfere that it is worth while recording some of them. Thus a heavy rain at the time when the blossoms are being fertilized may prevent the perfect fertilization of the fruit blossoms. This is unfortunate, and it is a difficulty hard to remove. The best we can do is to accept it as inevitable, and trust to a better season next year.

Another thing is, we have many fruit trees in the orchard that are naturally weak in pollen. When the fruit does set it is large and fine; but this does not offset the drawback that the blossoms are naturally weak in pollen. All such trees should be discarded from the commercial orchard. Then again we have fruit trees that ripen the pollen before the other parts of the flowers are ready to receive it. The result is imperfect pollenization. Such trees should likewise be of a limited number in the orchard. In fact, while some varieties have a tendency to these weak points, it is necessary to select trees that emphasize the strong point of fertilizing the flowers at the right time and abundantly. When a tree shows imperfect pollenization for two or three seasons, while the others in the orchard are good, it should be

replaced by another, or grafted with some other kind. It is worse than folly to wait on hoping that it will improve with age. It will always be a disappointment.

New York. S. W. CHAMBERS.

For The Michigan Farmer.

THE GARDEN.

Such a season as this is not often seen as far north as Oakland County. Even in the latter part of October some of the gardens on high ground have been only slightly damaged by the frost. Squash vines still green and tomatoes ripening give our gardens the appearance of a long-continued summer.

But in some ways this warm fall has been an injury. Cabbages that were set a little too early have spoiled unless they were attended to in time, and in the farmer's garden such things are easily neglected at this season of the year. As a result, the heads have ripened prematurely and burst open, thus ruining the winter's supply of this desirable vegetable. Ordinarily it does very well to plant the seed of early varieties late in the season and depend upon them for fall cabbages. This year seems to be an exception. The continued warm weather and abundant rain have made the difference.

Brussels sprouts have also been spoiled by the warm weather. They

(Continued on page 345.)



A man in the darkness of hopeless disease is of all men most miserable. When doctors and medicines innumerable have been tried and found wanting, and loving friends vainly urge upon him the food he cannot eat and which brings him no nourishment or strength, what is to be done?

Men and women who have sunken so far into weakness and disease that the whole body seems to be permeated and poisoned by it have found health, strength and vigor through the transforming, electrifying power of that wonderful "Golden Medical Discovery" which Dr. R. V. Pierce, of Buffalo, N. Y., proffered, thirty years ago, to sick and suffering humanity.

During all the years since then this marvelous "Discovery" has been building up weak and debilitated constitutions by its extraordinary influence upon the human, nutritive system. It gives the digestive organism keen power and capacity to appropriate every life-giving element from the food taken into the stomach and transforms it into rich, highly vitalized blood and healthy flesh, bone, sinew and nerve fiber.

Consumption in all its earlier stages is arrested and counteracted by the tissue-building, flesh-making, life-promoting power of this grand medicine and there is no darkness of bodily ailment so dense but it will shed upon the sufferer the light of renewed hope.

Dr. Pierce's Pellets cure constipation.



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Shoots white, remaining so as long as fit for use; robust and vigorous. Nick Ohmer, largest new Strawberry: 70 varieties Miller's Red Raspberry, the finest. Consult our undated list of peach trees—over 1,300,000 for sale. Catalogue free. HARRISON'S NURSERIES, Berlin, Md.

SPECIAL SALE.

Call's Nurseries, Perry, O., are making a Special Sale of Fruit Trees, at greatly reduced prices. To those of our readers who are wishing to set fruit trees of any kind this is the "Chance of a Lifetime" to secure the best quality of strictly first class trees at bottom prices. No finer trees were ever offered for sale, and all trees are warranted free from scale or disease of any kind. Write them for price list stating the number of trees wanted.

WE'LL BUY OR SELL SEEDS

TIMOTHY, CLOVER, ALSIKE SEEDS. SEND SAMPLES FOR OUR BIDS. New methods of cleaning enable us to save all the good seeds and remove all the weed seeds. We can therefore pay fair prices for seeds—every quality—and can sell clean seeds at close prices. Booklet SEND SEEDS FREE. THE WHITNEY-NOYES SEED CO., BUFFALO, N. Y.

THE STORRS & HARRISON CO., leading American nurserymen, offer one of the most complete assortments of FRUIT AND ORNAMENTAL TREES, SHRUBS, ROSES, BULBS, SEEDS. 45th year. 44 greenhouses. 1000 acres. Write for valuable catalogue free. Box 50, PAINESVILLE, OHIO.

should have formed an abundance of little heads, but instead have kept growing at the top and are worthless. They have never been of much account with us, but this year they are the poorest of any season since we began raising them. The stalks have obstinately refused to grow anything except large, coarse leaves, such as are valuable only for the hens and cattle.

After repeated attempts to grow lamb lettuce or corn salad it must be acknowledged that our efforts have not been crowned with success. It is slow in starting and slower still in its growth. A hot or a dry season soon ruins it. Thus far we have found it of little value for summer use. It is more valuable for early spring use when sown in the fall and wintered over, but as a summer crop we do not consider it worth bothering with. There are too many other salad plants at that season of the year which are much easier to raise.

Cauliflower is another vegetable which has been a disappointment. It seems to need just the proper kind of soil, the most favorable of seasons, and the right kind of a gardener. Our several failures are probably due to a lack of the last, as variety in both soil and weather has made no difference in the result. Now some one will say that it is as easy to grow cauliflower as anything. Perhaps it is, for the right person. Anyhow, there are not many who try it. A garden with really fine cauliflower in it is not often seen, although the vegetable is usually a favorite. In this case it seems to be advisable for us to patronize our more successful neighbor. He can raise a dozen heads cheaper than we can one, and is deserving of a little encouragement. Perhaps in the course of time there will be a variety which will grow as readily as other members of the brassica family.

We have frequently noticed that the asparagus bed is neglected in the fall. This is something that should receive attention. The tops should be cut down and removed before the berries are ripe enough to drop. Plants which come up from these seeds are likely to be troublesome weeds, and a little precaution will save no little annoyance.

A mulch applied to the asparagus bed after winter has set in will be well paid for in next year's crop. The asparagus is too often left to shift for itself, but there is no vegetable which shows more gratitude for good cultivation. If kept free from weeds and supplied with plant food the bed will yield an abundant harvest in the spring and summer when most needed.

The New Zealand spinach, which has proved satisfactory for early summer use, has shown itself well adapted for growing in the fall. Seed which ripened the latter part of summer was sown and grew plants large enough to be serviceable for some time. This is one of the most rapid growing of pot herbs. It adapts itself to a variety of soils and conditions. The large amount of foliage which it yields makes it desirable for the small garden, and the quality is good, though not the best among the plants grown for greens. It is certainly worth trying to those who find the common kinds of spinach uncertain.

Oakland Co.

F. D. W.

SAVING VEGETABLES.

The following from the American Gardener contains some good suggestions regarding the keeping of vegetables, and is also timely:

Among the many studies which must necessarily occupy the gardener's mind, that of the weather is one of importance. Experience and strict observation alone teach him to see the signs of approaching changes and how to act accordingly. At this season of the year he must naturally look for the approach of frost. It sometimes comes rather suddenly, but the watchful man is seldom caught unawares.

Tomatoes are one of the most easily damaged subjects, and on healthy plants there will be quite a number of fruits sufficiently matured that they will ripen up and be perfectly good if picked when the first signs of approaching frost are seen and placed in some bright airy place. They should be spread in single layers and turned over occasionally to insure even ripening.

Sweet corn is not so easily damaged

as the above, but still sufficiently easy that it is better to take the precaution to pull all the sufficiently matured, tying them in bunches and hanging them in an airy shed or some such place. In this way they can be kept good for from two to three weeks.

Lima beans that are anyway well filled may also be saved. Though the damage to these is not so apparent as to some of the others, they are rendered bitter and harsh to taste if subjected to freezing. Spread thinly and kept in a cool place they keep fresh for a considerable time. Those still remaining that have become too hard for using in a green state may be dried for seed or for winter use.

Egg plants may also be kept fresh for weeks if harvested before they have been touched by frost, but if once damaged, though slightly, then good bye to their keeping.

There are several others, such as peppers, okra, etc., that can be saved and their season considerably extended by a little care and forethought.

Though a few degrees of frost will not harm squash and pumpkins as far as the fruit is concerned, it doesn't take many degrees to spoil the plants, after which the fruits had better be gathered as soon as possible as they gain nothing by being left after the foliage is destroyed and damaging frosts might occur. Like most other subjects for winter keeping it is necessary that they be placed in such a situation and in such a way that they have the advantage of a free circulation of air all around, and an occasional turning over must of course not be neglected.

After a continuous service of ten years Hon. T. T. Lyon, of the Agricultural Experiment Station at South Haven, is to retire. He is one of the best known horticulturists in the country. While only connected with the sub-experiment station for ten years, Mr. Lyon has been engaged in carrying on experiments with fruits, especially apples, for half a century. His first experiment orchard was near Plymouth, this county, and from there he went to South Haven a number of years ago. At the latter place he carried on a nursery and fruit farm, and this was finally selected as the location of the sub-experiment station, and Mr. Lyon was placed in charge. It was a wise selection, and he has since labored faithfully to aid the fruit interests of the State. He has certainly earned a rest.

The Dairy.

Conducted by J. H. Brown. Every reader of The Michigan Farmer, who is interested in dairy matters, is earnestly invited to frequently contribute to this department. Send all dairy correspondence to Battle Creek, Mich.

THE EDITOR'S DAIRY NOTES.

HOW SHALL I WATER MY COWS?

A correspondent is thinking of putting in a system of pipes and buckets for watering in the stable. He wants our advice.

If you have plenty of floor and air space for each cow, put in the water system by all means. If your stable is small, ceiling low, and crowded, and if you were born tired, as we were, don't put this system in.

ONE EXTREME BAD AS ANOTHER.

We believe it is going to an extreme to keep cows in the stables continuously from October 15 to May 1st, as some dairymen advocate. With close confinement in basement stables, poor ventilation and poorer and insufluent light, cows will, sooner or later, break down under the strain. Such cows are usually forced to eat all they can stuff down of too much carbonaceous food. In addition to this they constantly remain in a vitiated atmosphere, the temperature sometimes reaching 55 degrees.

In addition to this, if water stands in pipes and buckets constantly before these cows, under the above conditions, we think the dairyman makes a mistake. Before putting in the waterworks we should make a change in the stable conditions.

DON'T BELIEVE IN FORCING COWS.

Understand that we do believe in keeping cows up to their full limit in milk and butter-fat production, but we do not believe in forcing them as the dairy breeds were forced in the tests at the World's Fair.

If these tests had been prolonged for a year, two-thirds of the cows would have died, and nothing but a

"record" of a "test" would have been left. This might have consoled the owners and experts who forced these animals under all the steam they could carry; but was it a true test at best? Is it not a fact that the same treatment, prolonged for a year, would have engaged the attention of the Societies for the Prevention of Cruelty to Animals?

One extreme is as bad as another. It does not pay to give a cow just enough feed to sustain life, and it is yet to be proved that a valuable Jersey cow can stand forced stuffing, even on a balanced ration, for a series of consecutive years.

IN OUR OWN STABLES.

We have low stables, somewhat low ceilings, and sometimes full of cattle. We would not put a waterworks system inside if we could. We feel assured that it is better for our cows to go out and step around for a half hour or so while the stables are being cleaned and bedded down—even in cold weather. In a bad storm we would not turn them out at all, except long enough to drink.

A CAUSE OF TUBERCULOSIS.

We seldom find this disease in a farmer's herd where rational treatment is practiced, although we have tested hundreds of cattle during the past year. But it is frequently found in herds kept in the suburbs of our large cities, under environments similar to those described above.

THEN AND NOW.

When the writer was a boy many farmers pastured their cows on a piece of summer fallow, or a barren pasture lot, during the summer months, and in the fence corners of the barnyard during the winter. These cattle were covered with lice and flies during a portion of the year, and with a blanket (not 5A) of snow during some of the coldest nights of winter.

Then it was the custom to have the cows "come in" in the spring, and go out of the practice of dispensing lacteal fluid gradually as the pastures dried up in August. Few farmers thought of growing some fodder crop for soiling purposes. It was a time when good cows had to work out their own salvation—or dry up.

Between the two extremes mentioned above we believe in "neither one." The dairyman who uses good common sense in breeding and feeding his dairy herd will come out ahead in the long run. When a dairy cow comes in she should be kept up to her full limit of milk production, and should be a persistent milker, but it seldom pays to force her to death.

HOW TO INITIATE A NEW CHURN INTO USE.

A new churn should never be employed for making butter until it has been soaked for several days. Furthermore, if it is perfectly tight when the soaking occurs, the bolts ought to be loosened more or less so as to prevent it from warping and getting out of shape. Some manufacturers stencil this instruction right on the churn. Despite this, however, many butter-makers neglect this precaution. What are the results? Generally, the butter is not good, it having for the first few churnings a decidedly woody taste.

Many ways are recommended for soaking a new churn, but one will go far to find anything that equals water for absorbing most flavors, and especially if it is used in the following manner: Have the water clear and cold for the first 24 hours, but change it two or three times; next, churn for an hour with a solution of some weak alkali (powdered lye or lime), then rinse with boiling hot water, and if convenient soak for 24 hours longer with clean flavored buttermilk or sour skimmed milk, repeating this should it seem necessary.

This process over, wash the churn as usual—that is, by first rinsing it with cold water, then churning for 10 minutes with boiling hot water, and

if steam is available, steam the implement sufficiently to make it warm enough to dry itself. Thus any new churn may be rendered absolutely clean and sweet.

Otsego Co., N. Y.

FRED O. SIBLEY.

It is very important that the bolts, bands, hooks and shaft bearings should be thoroughly galvanized. Insist upon this, as the salt and water form a combination of oxide and iron that no amount of scrubbing can efface. Never leave a churn covered after it has been washed and rinsed out. Let pure air have free access to its interior until the next churning day arrives.—Ed.)

COWS IN THE WHEAT.

I wish to enquire through The Farmer if there is any danger of injury to milk cows from turning them into wheat fields that have got very rank and large. I turned my cows into the wheat one night and was told by a neighbor that it would cause them to lose their calves—that he had ruined his milk cows once in that way. Shall not turn them in again until better posted.

CHARLES KAYNER.

Lenawee Co., Mich.

(We should not do it ourselves. What say you about it, brother dairy-men?—Ed.)

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DETROIT, SATURDAY, NOV. 5, 1898.

This paper is entered at the Detroit Postoffice as second class matter.

BALANCE OF THIS YEAR

FREE!

All new subscribers to THE MICHIGAN FARMER will receive the paper the balance of this year FREE. That is, for only 60 cents we will start all new subscriptions at once and send the paper to Jan. 1st, 1900. Read Important Announcement on next page.

According to a report from New York, unofficial estimates show that during the months of July and August the New York Stock Exchange and the Consolidated Exchange paid \$1,250,000 in taxes on transactions, in addition to what they paid in special taxes on checks, telegrams and commercial and legal paper. This shows that the war taxes are reaching a class that are always able, but never willing to put up money for taxes. Dealers in New York and Chicago are agitating the question of having such taxes repealed at the next meeting of Congress.

The oats market is in a very peculiar condition, and one which promises well to those who have a surplus. Cash oats in Chicago are selling above the May option. The visible supply is increasing very slowly, and was only 6,080,000 bushels on Saturday last, as compared with 14,882,000 bushels at the same date a year ago. Values keep advancing slowly, but steadily. At this date last year the range of prices in this market was 21½ to 22 cents per bushel. Now it is 27½ to 28½ cents. A Chicago grain dealer says of the situation: "The oat visible supply is 10,000,000 bushels less than last year, and there are absolutely no stocks anywhere, either in country stations, public markets or in the hands of eastern distributors, while our export demand is as sharp and pressing as it was last year. Under these conditions we believe oats will advance sharply and that purchases made about these prices cannot at any time show much loss."

THINKS THE ENGLISH FARMER HAS THE ADVANTAGE.

To the Editor of The Michigan Farmer:

In your issue of Oct. 15th you say the position of the agriculturist in Great Britain has become an extremely difficult one. Is not the position of the farmer of the United States just as grave, or even more so? The Englishman has a home market at his door for everything he can raise, it matters not whether it be a big crop or a little one. Not so with us; when we have a big crop of many things we are unable to harvest and market it even at a ruinous price. I only have to refer to our big apple and potato crop of two years ago. To-day England has a good hay crop, therefore does not need much of ours. Can you tell us where we can market ours? Potatoes are only a little over two-thirds of a crop, but still they are selling in the interior for 25 cents per bushel; what would they be if they were a full crop? Apples are not over half a crop, but still the bulk has been marketed at from 20 cents to 50 cents per cwt.

The agriculturists of England are organizing into associations to protect their interests by keeping out our cheap produce. If they succeed where will our markets be? I am not bewailing our position, but if the position of the English agriculturist is precarious, ours is more so. Much has been said of late about English friendship; it is all very nice, especially during war; but nevertheless England has her foot on our neck. We must send her cheap produce or gold. When she does not want the former, or we have it not for her, the latter must come, even if our home market is ruined.

Lapeer County. FARMER.

We think our correspondent was feeling a little blue when he wrote that letter, and unconsciously exaggerated the hardships of the American farmer and over-rated the advantages possessed by his English competitor. Let us look into the position of the agriculturist in Great Britain for the past few years. The average farmer does not own his land; he rents it from some big land-holder. The yearly rental is frequently more than new lands sell for in this State. That has to be paid every year whether prices are up or down, or crops are good or bad. His lease compels him to keep up the fertility of his land by feeding out the bulk of the hay, all the straw and coarse grains, and the root crops to live stock. Each year what he has to sell is worth less because the importations of foreign products keep increasing. Every drop in prices in the producing countries abroad causes a decline in the English markets. The average Englishman to-day eats more foreign than home agricultural products. This applies to meats, dairy products and breadstuffs. The foreign article sets the price for what the English farmer has to sell, and every new railway built into the new states of the Union, India or Russia, every drop in the cost of transportation, is represented in the English markets by cheaper products, and a more liberal supply. The English farmer's competitors are the cheapest producers in the world, whether they are in the United States, Russia, India, Australia or South America. The failure of any or all his crops does not help the price he receives. They are not important enough to affect values except to a very limited extent. It simply means heavier foreign importations. The result is seen in the gradual decline in the number of farms under cultivation in England, the renters leaving the country for some other land where the conditions are more favorable, or dropping out of sight in the large cities and villages. That is why Englishmen, Scotchmen and Irishmen emigrate in such large numbers. The United States, South America, Australia, New Zealand, South Africa and India are peopled with those who have been compelled to leave Great Britain because there was no opportunity for advancement. We don't hear of many Amer-

ican farmers leaving for some other country.

The special crops referred to by our correspondent are those in which the greatest fluctuations are experienced. Potatoes are low in price, so is hay. Why? In the one case a large number of farmers, relying upon the potato as a money crop, and not having much else to realize on, are selling their crop below its value. In the case of hay it is selling low because not enough of it is fed out on the farms. Dairy products, beef and mutton are selling at high prices. The man who sells his hay does not have any of these products to market; hence those farmers that do, get good prices while hay is cheap. If more farmers would pursue a settled policy of producing a certain amount of the various food products each year—beef, mutton, pork, butter, and breadstuffs—using the hay and coarse grains to produce them, the returns for all these crops would be more regular. There would not be \$10 hay one year, and \$4 hay the next, nor would potatoes sell at 60 to 75 cents per bushel one year, and 10 or 20 cents the next. Whenever we hear of a farmer making a big profit on some special crop, we know so much of it will be produced the next year that every one raising it will lose money. If the English farmer had followed that method he would have gone out of business twenty-five years ago. The farmer, or the business man for that matter, who becomes a market chaser, expecting to make a big lot of money in some special line, will surely fail. It is simply speculation. The American is more given to it than any other nationality. His feverish anxiety to get suddenly rich operates to spoil his judgment, and he puts his whole farm in potatoes, all his money in a wheat deal or a town site, or buys a gold brick, because he thinks there is a lot of money in it. In nearly every instance it results in disappointment and failure, and the investor becomes soured with the world, which he thinks is responsible for his troubles. How do we know this? By the most costly of all methods of gaining knowledge—experience.

POTATOES.

To the Editor of The Michigan Farmer:

I read The Farmer, and am glad to get reports through its columns from other farmers in regard to crops, especially potatoes. Thinking it would be of some benefit to others to hear from this part of the country in regard to the potato crop, would say that the yield here will not be more than one-half of what it was last year. The frost of July 10th left a good many farmers without potatoes for home use. Farmers report from 40 to 100 bushels per acre, with the exception of now and then a patch that yields better. Buyers are offering 20 cents.

Wexford Co. JOHN J. MINER.
There is a poor market for potatoes at present, but no one should think of selling his crop at 20 cents. Better store it, as values are sure to advance, and if they reach double those figures it will not be surprising. At present farmers in the eastern states, and in some western ones, too, are selling freely. Once these sections are partially cleaned out we shall see a very different tone to the market. No one wants them now, and it looks as if it would be good policy to hold them till they do.

Since the above was placed in type, H. Voorhees, of Grand Traverse County, sends the following regarding the crop in that section:

"Potatoes are losing in value; now selling at 15 to 20 cents per bushel. There appears to be an enormous crop west, so that they are feeding them to stock, Chicago is flooded. There is certainly a great amount in this part. There was a fearful craze to plant them last spring."

Osceola county farmers will go more largely into the apple growing business next season, and give less attention to potatoes. The reason is the ever-lowering price of tubers and the good prices which apples have brought for several years past. Osceola county apples are of as fine quality as are grown anywhere in the State, and thousands of new trees will be set out next spring.

We find the above paragraph in an exchange. If the farmers referred to will carefully look up the record of prices of potatoes and apples, they will find them the most uncertain crops grown on the farm. For instance: two years ago this week apples were selling in this city at 60@90 cents per bbl., the barrel probably costing 15 cents. Potatoes were selling at 20 to 25 cents per bushel here, and 18 to 20 cents in Chicago. Last year at this date potatoes were selling at 45@50 cents per bushel in this market, and apples at \$2 to \$3 per barrel. Potatoes had doubled in price, so had apples. This year potatoes are selling at 32 to 35 cents per bushel in this market, and apples at \$2 to \$3 per barrel. If potatoes sold low all season, which we do not believe will be the case, next year a smaller area would be put into the crop, and prices would be higher. In 1894 the price of potatoes in this market on November 10 was 50 to 55 cents per bushel. They sold up to 75 cents before the close of winter. Large sums were made on the crop by growers in this State, and then every farmer put in a larger area the next spring. They sold down to 8 cents per bushel at country markets the next fall.

Last week we referred to the Indian outbreak in Minnesota, and expressed the belief that it was occasioned by the bad treatment given the Indians. Since then, at a meeting of Congregational ministers held in Chicago, the Indian question, and particularly the recent outbreak, was discussed by Gen. C. H. Howard, who was Indian inspector under the Garfield administration. We give some extracts from his remarks:

"Drunken United States deputy marshals were in the habit of distributing whisky among the Indians and then arresting them for drunkenness and taking them 30 to 100 miles from the scene of their arrest for trial, as the fees derived from the arrest and conviction of an Indian were about \$30. Gen. Howard said that individual lumber dealers were in the habit of starting fires on the property of the Indians, and as a result they purchased the charred timber, which is really as valuable as the uncharred, under the treaty of the United States with the Indians, at a \$25 reduction."

"But beyond this it was shown that for more than 25 years these Indians had been treated in a way to exasperate any people. The facts concerning the breaking of treaties and the outrages perpetrated upon them through this very source of political appointments and political management and the conduct of their affairs by commissioners, Indian agents, pine appraisers, deputy marshals, and others not with a view to the good of the Indian in any sense, but for plunder, for rewarding political service, for making political capital—in short, for everything rather than the direct benefit of the Indian—those facts were fully brought out, and it was felt by all present that they ought to be ventilated."

"It is possible in this way that this outbreak at Bear Island, in Leech lake, may prove the means of finally ending the farce of political appointments in the Indian service. If you who are present will take the matter up in earnest and disseminate the knowledge of the outrages which have been heaped upon these Indians during a quarter of a century, a public sentiment may be awakened which will make itself felt in Congress and the source of all these wrongs may be abolished."

"The Indians have been robbed of \$300,000 of their funds, and it can not be wondered at that they at last became exasperated."

It was not Spaniards who were treating the Indians in the manner described above, but good American citizens and government officials.

Consider the Difference.

THE MICHIGAN FARMER is a weekly paper of 52 issues a year and goes to the subscriber often enough to be of some value to him in considering current topics, news and markets, while a monthly paper is only 12 issues a year and a semi-monthly only 24 issues a year. A monthly to be in proportion as low in subscription price as THE MICHIGAN FARMER would have to be sent for only 18 cents a year and a semi-monthly for only 26 cents a year.

IMPORTANT ANNOUNCEMENT

To Our Subscribers.

The competition and strife among publishers during the past few years for increased subscription lists has produced a system of paying commissions and special cash premiums to club raisers and subscription agents that has been increased and extended each year until with the large expense of a high salaried subscription manager, a corps of expert assistants, expensive posters, multiplicity of correspondence and circulars made it cost us last year (and we feel safe in saying all other \$1 weekly papers) fully FORTY CENTS for every subscription we received. After giving this matter very serious consideration we decide this system is not just to the subscriber. If we can afford to pay out \$16,000 on our 40,000 circulation we conclude it more honest to give it to the subscriber, therefore we decide to announce that we will try the experiment of sending THE MICHIGAN FARMER weekly to the subscriber direct for one year

FOR ONLY SIXTY CENTS.

To make this experiment successful our subscribers must appreciate that we assume they are intelligent enough to send in their own subscriptions and we are depending upon them to do so. We state plainly that in accepting 60 cent for THE MICH. FARMER direct from the subscriber we are receiving as much as the publisher of any \$1 weekly paper is receiving net for his paper. The only difference is that we have the courage to try for one year, giving the 40 cents to the subscriber instead of to the club agent—and to a vast unnecessary expense account. If the subscribers will assist and encourage us in this experiment by forwarding their own subscriptions it will become permanent. We wish it distinctly understood that no economy will be inaugurated or reduction in the expense of publishing this paper. Its very high standard of excellence in every respect will be fully and completely maintained and its constant system of improvement and increase in value and appearance will be fully continued. It is clearly the leader of the agricultural press of America in quantity and quality of matter, mechanical execution, reliability, enterprise and high moral instruction, and it will continue to be the leader in the future as in the past. As we are planning many important new features and engagement of many new writers for next year we will most emphatically promise our subscribers that no agricultural paper on this continent shall equal THE MICHIGAN FARMER in genuine value to the farmer and his family. We believe our subscribers will appreciate this effort on our part to save them in cost and hope and expect that each and every one will not fail to send us his own subscription and will also assist us by telling his neighbors and friends about the paper and its price. Remember that we are depending upon the subscriber this year and not upon the agent, and we believe our subscribers will give us good substantial support in this effort to do them justice. THE MICHIGAN FARMER is the most expensively edited agricultural weekly in America. We appreciate that a yellow cover or the publication of a few half-tone cuts made from cheap photos of existing objects or scenes do not constitute value in an agricultural paper. It is a vast accumulation of a great variety of original instructive matter prepared by paid contributors, every one of whom are practically successful in the branch of agriculture they write about, that add expense and make the paper valuable. To design and engrave one of the practical illustrations like many THE MICHIGAN FARMER is publishing in such large numbers actually costs us more than all the half-tone cuts published in a year by some of our contemporaries that claim so much for their great illustrations and yellow cover. There is no other agricultural weekly that would have dared to make this reduction to their subscribers and drop the agency system and no other one is one-half as well prepared to do it as THE MICHIGAN FARMER. It is the best known agricultural weekly in this country, has abundant capital to sustain it beyond question, a circulation so extensive that it can advertise itself, and what is greater than all, we believe we have the confidence and friendship of our readers and confidently expect they will demonstrate to us their appreciation of this important reduction in price

and that THE MICHIGAN FARMER for next year will fill a much larger field than ever before, retaining every one of its present subscribers and through their kind assistance get many thousands of new ones.

A DAY OF THANKSGIVING.

President McKinley has issued a proclamation designating Thursday, November 24th, as a day of thanksgiving. The proclamation is as follows:

The approaching November brings to mind the custom of our ancestors, hallowed by time and rooted in our most sacred traditions, of giving thanks to Almighty God for all the blessings He has vouchsafed to us during the past year.

Few years in our history have afforded such cause for thanksgiving as this. We have been blessed by abundant harvests, our trade and commerce have been wonderfully increased, our public credit has been improved and strengthened, all sections of our common country have been brought together and knitted into closer bonds of national purpose and unity.

The skies have been for a time darkened by the cloud of war, but as we were compelled to take up the sword in the cause of humanity, we are permitted to rejoice that the conflict has been of brief duration and the losses we have had to mourn, though grievous and important, have been so few, considering the great results accomplished, as to inspire us with gratitude and praise to the Lord of Hosts. We may laud and magnify His holy name, that the cessation of hostilities came so soon as to spare both sides the countless sorrow and disasters that attend protracted war.

I do, therefore, invite all my fellow-citizens, as well those at home as those who may be at sea or sojourning in foreign lands, to set apart and observe Thursday, the 24th day of November, as a day of national thanksgiving, to come together in their several places of worship for a service of praise and thanks to Almighty God for all the blessings of the year, for the mildness of the seasons and the fruitfulness of the soil, for the continued prosperity of the people, for the devotion and valor of our countrymen, for the glory of our victory and the hope of a righteous peace, and to pray that the divine guidance which has brought us heretofore to safety and honor may be graciously continued in the years to come.

PUBLIC AFFAIRS.

Some time ago the Railroad Commissioners of South Carolina ordered the telegraph companies of that state to pay the war tax on messages sent within its borders. The telegraph companies obtained an injunction from Judge Simonton, of the U. S. Circuit Court of South Carolina, restraining the commissioners from enforcing their order. Since then the case has been argued before Judge Simonton, and he has decided to make his injunction perpetual. As we are interested in this matter of war taxes on telegraph messages in Michigan, and suits having been started to compel the companies to pay them, this decision is quite important. Whether it will be appealed to a higher tribunal or not we cannot say, but as the report of the decision says nothing on that point it looks as if the Commissioners had accepted the decision as final.

The death of Col. George E. Waring, Jr., on Saturday of last week, removes a valuable and highly popular citizen from public life. Col. Waring was one of the most distinguished agricultural experts and sanitary engineers of the country, and was born in Poundridge, N. Y., on July 4, 1833. He was educated at College Hill, Poughkeepsie, and subsequently studied scientific agriculture with the late Prof. James J. Mapes. In 1855 he was given charge of Horace Greeley's famous farm at Chappaqua. Three years later he was given the direction of the cultivation and drainage of Central Park, in New York city. In 1861 he entered the Union army as major of the Garibaldi Guards, and performed good service for the government during the four years he was in the army, and was promoted to the rank of Colonel. After the severe yellow fever epidemic in Memphis in 1878, he was called to that city to devise a system of sewerage, the general features of which have since been adopted in many other cities. Mayor Strong, of

New York, appointed him Street Commissioner, and he did a most valuable and greatly needed work in cleaning up the streets of that city. Early in October he was sent to Cuba at the head of the commission to select camp sites for the American army of occupation, and to devise plans for the sanitary improvement of Havana and other Cuban cities. He had begun the work of perfecting plans for cleaning the harbor of Havana, one of the foulest plague spots in the new world, when an attack of yellow fever cut him off in the midst of his usefulness.

It has been generally accepted as an established fact that the average Cuban is not a person of sufficient intelligence to appreciate the boon of American citizenship. A report from Gen. Leonard Wood, who is doing such commendable work in cleaning up and governing the department of Santiago, has developed a feeling of apprehension that we may have been misled as to his capacity to appreciate the blessings of a republican form of government. The dispatch says: "No fewer than 2,000 insurgents, of whom 500 are officers, want offices, and their clamor amounts almost to a demand." They seem to have grasped the possibilities of American citizenship as thoroughly as if they had landed at Castle Garden instead of being born in Cuba. We were in hopes that these people knew nothing about "offices," and that the surplus aspirants we had in Michigan might be shipped over there, to the great benefit and relief of the State, and especially the city of Detroit. We could fill every office in Cuba, from governor to street sweepers, and not interfere in the slightest degree with the affairs of this much-governed and over-taxed city, and every man would be a patriot as long as his salary was paid regularly and someone else did the work.

The treasury statement of the public debt shows that at the close of business October 31, 1898, the debt, less net cash in the treasury, amounted to \$1,110,966,922, an increase for the month of \$43,487,717. This increase is accounted for by the issue during the month of about \$36,680,000 of the new 3 per cent bonds and a decrease of about \$7,238,000 in the cash on hand. The entire amount of the new loan so far taken up in the monthly statement is \$179,399,180. The total cash in the treasury and in the various government depositories is \$933,249,397, against which there are demand liabilities outstanding amounting to \$633,011,122, leaving a net cash balance in the treasury of \$300,238,275. The monthly statement of the government receipts and expenditures shows that receipts for the month of October amounted to \$39,630,051, and disbursements, \$53,982,276. The receipts from customs amounted to \$15,555,234, against \$9,713,494 for October, 1897. Internal revenue, \$22,356,511, against \$13,614,872, for October last year. Miscellaneous, \$1,718,305, against \$1,063,047 one year ago. The increase in receipts for the month as compared with October, 1897, amounted to about \$15,250,000. During the four months of the present fiscal year, the receipts exceeded those for the corresponding period in 1897, by over \$60,000,000.

TO CHEESE MAKERS.

Fruit Ridge, Mich., October, 1898.

To Farmers and Dairymen of Michigan:

I most earnestly call your attention to the great importance of the work done by the Agricultural College through its special course in cheese making, to commence Monday, November 28, of the present year. The course is specially calculated to substitute demonstrated facts for guesswork in the science of cheese making. Every young man who contemplates making cheese making a business should certainly avail himself of this opportunity to equip himself with the practical knowledge to be obtained through this special course.

I hope to see the time come when every cheese maker who applies for work at a factory will be compelled to show a certificate of graduation from some such school as now being conducted at the Michigan Agricultural College in the interest of dairying.

The course is cheap and easily within the reach of every young man, no matter how limited his means. The entire dairy interests of Michigan will be greatly benefited by having large numbers attend this special course.

GEO. B. HORTON.

NEWS SUMMARY.

Michigan.

An electric road between Detroit and Romeo is to be completed by next July.

Snow in Marquette county is reported so deep as to block trains on the logging railroads.

Eighteen lives were lost in the wreck of the steamer L. R. Doty in a storm on Lake Michigan October 25.

Fruit shipments from Fennville have ceased for this season. The total amount sent out by the fruit shippers' association of the village was 450 cars.

Farmers around Rochester are very much interested in the beet sugar subject and are trying to secure the erection of a factory in the village.

It is estimated that at least \$500 worth of sparrow bounty orders have been forged in Jackson county. The same tale is told in other counties in the state.

The pure food inspectors claim that Kalamazoo milk dealers are adulterating their milk to such an extent as to render it injurious to health. Prosecutions will follow if the practice is continued.

The project for a canal to connect Lakes Superior and Michigan seems to be a go. The Chicago promoters have issued the following notice: "Notice is hereby given that the books for subscription for stock of 'The Lake Michigan and Lake Superior Ship Canal & Dock Co.' will be open November 3, 1898, at 53 State street, Chicago. Estimated cost of canal, \$10,300,000."

General.

The treasury department has practically completed the issue of the \$200,000,000 of 2 per cent war loan bonds.

The Illinois supreme court has decided that the Chicago city council may insist on compensation for street railway franchises.

The Omaha exposition closed Monday. The total attendance will exceed 2,600,000, and the stockholders will divide about \$400,000 of profits.

All European powers have accepted Czar Nicholas's invitation to attend the proposed disarmament congress in St. Petersburg, and will send three delegates apiece.

M. Brisson, premier of France, resigned last Friday and was succeeded by M. Dupuy. Brisson's entire cabinet retired and new men have been selected for every position.

Charles S. Dawes, comptroller of the currency, has ordered that the system of semi-annual examinations of national banks shall extend over all cities without exception.

It is announced from Washington that during the coming winter retaliatory measures against Germany will be taken because of her unjust discrimination in regard to American pork.

The French Court of Cassation has granted the application for a revision of the sentence of the Dreyfus court martial, but has refused to order the release of the prisoner pending the result of the revision.

Advices received from Santiago Thursday morning state that it is believed the United States transport Panama has been lost. The Panama left Santiago on Tuesday en route for New York. She carried 320 passengers, the majority of whom were soldiers.

Coal operators of Virden, Ill., intend to secure injunctions restraining Gov. Tanner from interfering with importation of laborers. The coroner's jury in the cases of the nine men killed in the riot on October 12 brought in a verdict that they were killed by unknown persons.

The Acme Wrecking Co., of San Francisco, has asked permission to raise the wreck of the Maine. The work will be done without expense to the government, which can buy the vessel when above water. If the government does not want her she will be exhibited in the principal cities, if she is raised successfully.

In accordance with instructions from President McKinley the American commissioners at Paris formally presented a note last Monday announcing the purpose of the United States to take the entire Philippine group and to assume such proportion of the debt as has been incurred in the improvement of the islands or for the benefit of their inhabitants. The Spanish commissioners were given time until Friday of this week to prepare their answer.

Grain shippers say the supreme court decision pronouncing the Joint Traffic association illegal, will prove a boon to the Chicago and New York grain markets. The effect of this trunk line association has been to keep the tariff between Chicago and New York rigid, while the tariffs by all roundabout routes were poorly maintained. With the association broken up and genuine competition between all trunk lines, Chicago and New York will command the bulk of the business.

A correspondent at Northville inquires if there is to be a fat stock show at Chicago this fall. We have not heard that one will be held. The one held a year ago seems to have left a bad taste in the mouths of its promoters and managers.

Germans are eating old and used up horses, mules and fat dogs on account of the scarcity of meat. The German government says that American meats are not good enough for the German people, but the steaks from old plug horses seem to be all right.

FRANK R. STOCKTON has written for The Youth's Companion an anecdotal article on new lines under the curious title of "The Wolf and the Wheelbarrow." There is not only an actual wolf and a real wheelbarrow in it, but lions, a lion-tamer, a famous tragedian and some interesting objects of natural history.

The Household.

CONDUCTED BY MRS. ELLA E. ROCKWOOD.

We should be pleased to have any of our readers who take an interest in household topics send in their views and opinions upon any subject which is under discussion, or which they wish discussed. The invitation is general, and we hope to see it accepted by many. Address all letters to The Household to Mrs. Ella E. Rockwood, Flint, Mich.

GRANDMOTHER'S HANDS.

Crippled and bent and marked with toil.
Grandmother's hands are busy all day;
They sew on the buttons and patch up the holes,
They take up the toys and put them away.

They smooth the pillow for Johnny's head;
They find a cure for his every pain;
They cover his kite and mend his sled,
And they tie the string to his railroad train.

They find the sweets that make him glad;
They sprinkle with sunshine all of his cares;
They spank him, too, when Johnny is bad,
Then dry again his bitter tears.

In years to come, when Johnny's feet
Tread cheerless paths of other lands,
Deep in his manly heart he'll bless
Both spans and gifts of those dear old hands.

—Atlanta Journal.

HOME CHATS WITH FARMERS' WIVES.

IN THE WAY THEY SHOULD GO.

"I long ago gave up believing it always safe to judge a child's home training by its own conduct," said a friend the other day, as we were discussing certain traits desirable and otherwise in children.

Knowing my friend to be a most careful and conscientious mother, I awaited her further remarks attentively.

"Now you know," she continued, "that I am naturally systematic and orderly about my work." I bowed assent to this, as I knew it to be true, also that she might have added neatness to the two qualifications named.

"But," she went on, "my daughter is not going to bear out my teaching; at least present indications do not point that way. She is now in her teens and is developing decidedly opposite traits to those I have tried by precept and example to instill in her ever since she was old enough to be taught anything. And it cannot be that she has inherited this from the other side of the family, for her father's mother was one of the very neatest housekeepers I have ever known. I should very much dislike people to judge me by my daughter in this respect, unless a change takes place in her, and so I am becoming exceedingly careful to avoid judging other parents by the standard of their children."

Here again theory and practice clash. According to the beautiful theory of "clay in the potter's hands," so frequently employed as a simile for the child in the hands of a parent, children ought invariably to come up exactly as they are trained, yet how often they prove disappointing in this respect. Try you never so faithfully to bring up a child in the way he should go, yet when he reaches an age where it is possible for him to do so, and he is going to do as he pleases about it. In spite of pre-natal influence and anti-natal influence, in spite of precept and example there is that born within some children which bids defiance to all acknowledged laws; something which refuses to be influenced when it ought to be and in the way that it ought to be.

The longer I live the more I am convinced that there is a mysterious, unfathomable something born within us that to a great extent makes us what we are. It is "the way our brain lies," as one man explains the reason some young men go wrong even though they have the best of home training and environment, while others with very little or no attention paid to their training grow up to be models of their sex.

Occult forces are at work within, and their effect varies with the individual. Heredity is a power little studied by the majority of people, yet many peculiarities might be traced to some long-ago-dead ancestor concerning whom no one now living has the slightest knowledge.

Habits of carelessness are frequently a great annoyance to parents. We know how we would have our children

do but not always can we feel satisfied with the result of our efforts. We must do the best we can, and that is all any one can do.

But for the encouragement of those who are striving to instill habits of neatness and order as well as other desirable attributes in their children let me say, do not despair though no visible sign of success be apparent. It frequently transpires that this is long delayed yet comes when the boy or girl approaches maturity. Many a little boy whose mother despaired of establishing in him habits of cleanliness and personal neatness has developed these traits with the advent of long pants and their added dignity.

And it may be the same with the girl referred to. When she goes out in the world a bit, gets a little more thoughtful, perhaps goes away to school where she will mingle with others, learn new methods and make new friends, I shall not be one bit surprised if she develops into a young woman who is neat and orderly enough to satisfy the most exacting.

We must not relax our efforts in the least, even if the case seems well nigh hopeless. There are few parents who do not have trials with their children. It requires tact, good judgment and lots of patience in dealing with the young, and never forget that line upon line, and precept upon precept, will have their effect somewhere, sometime, even though we may not be alive to see it.

A FEW THOUGHTS ON SYMPATHY AND RELIGION.

Why is it that the words sympathy and religion are so often spoken as though they were synonymous with sorrow and death? Have not all of us friends that we treasure, not only because they have sympathized with our sorrow, but because they have rejoiced with us in our happiness? And I believe it takes more true nobility of character to rejoice sincerely with our friends' happiness than to console with their misfortunes.

I have heard the assertion that we could get along very well without religion as long as we were enjoying the sunshine of happiness, and only need to use it as a sort of umbrella in time of sorrow. But that is a mistake. I think we need to feel the assurance of a Father's protecting love to help us bear our happiness full more than our grief. Knowing the uncertainty of this material life we could not bear our earthly happiness if we had not the promise of life eternal, and a simple trust in our all-wise Father.

It is not the unhappy, lonely, discontented individual who feels the need of the gospel. He is often so full of discontent and hatred that he only thinks of death as a relief from a state that gives him no pleasure. He has no desire for a future state. To him there are no happy, smiling faces "looking down from the windows of heaven," and there is no loving hand-clasp to hold him to this life, whereas the happy individual has much to lose by death. And the thought would be very oppressive if it were not for the gospel of glad tidings of great joy.

I believe it to be the test of true friendship when we can rejoice with the success of our friends and not feel any envious thoughts, or seek to find some flaw in their armor. It is the fault of many that they sting their friends with unkind remarks. It is cruel to cloud anyone's happiness when it does us or them no good. It is very seldom anyone is made better by being hurt, and we often lose a friend by these stinging little speeches. We sometimes kill the love and trust of our nearest and dearest in this way. I sometimes think bluntness or plainness of speech is only another name for ill temper.

If some have been so unfortunate as to find that life holds more of pain than of joy for them, let them not seek to impress others with their gloom, but rather offer up a heart-felt prayer that they may never find it so.

I sometimes think the one who is most kind comes nearest being truly great; and when we can sincerely rejoice and sympathize with one another's happiness we will come near fulfilling the command, Love ye one another, and earth will become a much pleasanter abiding place.

MRS. MAC.

D. H.—If you had used the Magic dyes you would not have had cause for complaint, as they do not bleed by washing.

NOTES FROM A HOUSEKEEPER'S EXPERIENCE.

One ounce of pulverized saltpetre dissolved in a pint of pure sweet oil makes an excellent liniment for inflammatory rheumatism.

To wash chamol's skin as it is usually done results in making it hard when dried. If washed in soapy water and rinsed in the same instead of clear water it will be soft.

If beans, potatoes, or any other vegetable boils dry and burns fast to the kettle do not make the mistake of pouring in water, which will spoil its contents, but rather quickly remove all that is not burned to another dish, when it may continue cooking and be uninjured.

In making coffee the flavor is destroyed and the aroma lost by boiling too much. One minute should be the extent of its boiling, and for very best coffee simply infuse with boiling water, allowing it to merely reach the boiling point, then set where it will keep hot until wanted.

Now that the season for wearing flannels is again here I wish all who have the care of them could know that borax is the very best agent to use in washing them. It is better than any soap, keeping them soft and nice. They will not shrink if this is used. Sometimes I add a little household ammonia to the borax and water if the flannels are badly soiled, as I do not like to rub soap upon the garments. Wash and rinse in water of the same temperature. In hanging to dry stretch into shape and dry quickly.

Tuscola.

HANNAH JANE.

JUST FOR A HOME.

The other day some ladies were discussing the recent marriage of a sweet, lovable woman. We hope and trust that it is a real love match, although they are not a youthful couple.

That discussion, and also the observation of this writer led to a few thoughts which she will send to the Household.

We believe that the love of home lies very near to the heart of the womanly woman, and, as she grows older that love grows stronger. Perhaps, for that reason, the temptation to marry for a home may be harder to overcome. But we think that a real, true love is more necessary for those people who are no longer young

because of the reason that habits and views of life are more firmly established. It will be harder to give up; the forbearance always needful to make real happiness will not be forthcoming so easily as in earlier years. While a happy married life is the most beautiful thing that can be in this world, we believe that of all people the two "unequally yoked together" are the most miserable creatures on earth. The house they live in will simply be a place in which to stay, and not a home.

Don't marry simply for a home, my sister. We are sure that there is much to enjoy even if one must walk alone to the end of life. It depends in great measure upon the individual, the happiness or misery. If the single woman allows the bitterness of life—that must come to all, whether married or unmarried—to make her disagreeable, no wonder she is alluded to as "that sour old maid." If, on the other hand, she will persistently look for the best in humanity, look for the beauties in nature, cultivate a taste for the best and purest in literature, we think that she will not find herself either friendless or unhappy even if she is an old maid.

"There's a sunny side of life,
And a shady side as well;
'Tis for every one to say
On which side he'd choose to dwell."

CLARA DELL.

PETTICOATS.

A petticoat for wet weather is made of dark blue storm serge. It is gored as far as the knees; has four gores, no lining. From the knees down is a deep, straight flounce with very scant fullness. This has a stiff lining, and for half way up from the bottom are rows of machine stitching half an inch apart.

A pretty petticoat made of an old black silk dress skirt is as follows: The foundation for the skirt is black sateen, four gores. From the knees down to the bottom the sateen is covered with the silk, sewed in with the seams. Half an inch from the bottom of the skirt is a ruffle of the black silk, cut straight, three inches deep. For a heading to this is a row of half-inch-wide black velvet ribbon. Half an inch above this is another ruffle, same depth and heading of velvet. Above this is still another ruffle and two rows of velvet.

CLARA.

Enameline is the Modern Stove Polish, which means UP-TO-DATE; that is, labor-saving, brilliant in effect, no dust and no odor. It makes a rusty old stove look as good as new in a minute. Put up in paste, cake or liquid form.

J. L. PRESCOTT & CO., New York.

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WANTS.

A reader of the Household wants to know of a good book on etiquette.

Another reader asks for directions for knitting ladies' mittens with three rows of small shells on the back.

The same lady asks how to keep comb honey. Any dry place, no matter if warm, is a suitable place to keep it. Dampness should be avoided, also severe freezing.

E. H. H. asks in regard to organizing a reading circle. For this we certainly can recommend the Bay View course, which is similar to the Chautauqua. While much cheaper it is in every way equal to it. For particulars write J. M. Hall, Flint, Mich.

Mrs. T. asks what kind of kettle to use in coloring. Will the dye stain whatever dish is used? Directions in regard to the proper vessel for dyeing usually accompany the prepared dyes. We do not think it will be difficult to scour the dye from a tin or brass kettle, although iron can be safely used with some colors. Suggestions are in order from those who have had experience.

Cora L. wants some of the readers of the Household to send directions for crocheting a hood for a grown person.

Those who can give information requested above please do so. When it comes our turn to ask a favor we appreciate a prompt response, so let us not forget to help others.

Mrs. C. C. S. sends recipe for mustard pickles and asks for suggestions for Christmas presents very soon, saying very truly that it will not be long before the holidays will be here.

REMEMBER THE BIRTHDAYS.

I heartily agree with Dolly Goodwill in regard to remembering the birthdays. It takes so little to make a child happy, and the years of childhood are but few. Almost before we can realize it they are grown up.

It has been our custom ever since the babies were old enough, to make the birthdays a little different from any other days. The feature most eagerly looked forward to is the birthday cake. It matters not what kind of a cake, just so it has frosting and candies on top. Sometimes it is a marbled cake, sometimes a layer cake with one layer colored with chocolate, the next with red fruit coloring, and the last left white; sometimes they are baked in little scalloped patty pans, but whatever the kind, they are not complete without the frosting and candies.

Then the pleasure of planning some little gift for each other, the mysterious whisperings and knowing looks that are exchanged. One can feel the signs of a coming birthday in the air.

And, mothers, when your little ones bring you presents, no matter what they may be, think of the love that prompts the gift, and make the heart of the little giver glad with your thanks.

Last spring the little three-year-old girlie used to go away over to the clearing with her papa, fill both hands with dandelions, and come back, all flushed and happy, with a "present for Mama." "Won't she be surprised?" she said to papa, "cause the ones in the yard haven't got their eyes opened yet, and she thinks these are just bootiful."

M. A. G.

CLEANSING DUCK'S FEATHERS.

I want to tell Mrs. A. G. Mann how to treat duck feathers to remove the peculiar odor she complains of. I know by experience that it can be done.

Sew up two old sheets and put the feathers in them. Have four sticks long enough to go across a barrel and place the feathers over it. With an old pan inside the barrel smoke them well with corn-cobs, but do not shut it up to tight or it may take fire. Turn the feathers occasionally and let them remain in the smoke for 20 minutes or more, then air well for several days, turning them several times a day. If the ticks are tainted and do not smell sweet, wash them, and when dry, return the feathers to them. Make four little bags of very thin cloth and put a little camphor gum in each. Drop these in with the feathers as you fill the ticks.

I wish someone would tell me plainly how to knit some kind of lace three or four inches wide. I don't

understand what is meant by k. o. p., etc., as I know nothing about knitting by letter.

MRS. A. BROADBEEK.

COOKING FOR AN INVALID.

A lady asks for hints on cooking for an invalid, and while I may not be able to suggest anything new, perhaps it may be a help and suggest other things to her.

Such a case calls for sympathy. We all know how hard it is to think of a variety, and that we must have. Everything must be dainty; a fresh napkin on the tray and one for use, the daintiest dishes the house affords, but not too many things crowded on at once.

We have a new breakfast food called "Vitoes." It is easy to cook, and we like it eaten with milk with or without sugar, the same as oatmeal. It would seem a waste to cook it in any other way than in a double boiler. I think it is the most nourishing of foods, as it has the germ of the wheat in it.

A baked potato is relished by an invalid, a little jelly or jam, sauce of different kinds, and fresh fruit if you have it, or a little of some things on the table. Cornstarch cooked by the recipe for invalids on the Niagara brand is nice. A piece of toast, different kinds of soup, eggs cooked in different ways—anything for a change must be thought of. There are many recipes in cook books purposely for invalids that may be used. If one has a weak stomach greater care must be exercised.

MRS. T.

CONTRIBUTED RECEIPTS.

Layer cake that will not dry out: One scant cup sugar and butter size of a large egg, beaten until creamy. Add one egg and beat well, then add two-thirds cup buttermilk, or sour milk will do, and one and one-half cups flour, with one teaspoonful of soda stirred in it, and one teaspoonful of baking powder. Flavor to taste.

Salad Dressing: One cup vinegar (not too strong), one cup sugar. Put these on the stove in a granite basin and bring to a boil. While it is heating beat two eggs, a teaspoonful of salt, a scant teaspoonful of pepper and a teaspoonful of mustard, and when smooth add to the boiling vinegar and

sugar. Set on the back of the stove and cook slowly until thick, stirring constantly to prevent curdling. While hot stir in a lump of butter size of a hickory nut, and when cool add two tablespoonfuls of sweet cream if you have it, or it will do very well without. This is excellent for cabbage or potatoes or for cold meat.

E. E. H.

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Doylies—7 to 12 inches—prices, 3 to 8 cents each.

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THOSE who subscribe at once for the 1899 volume will receive the remaining issues of 1898, including the beautiful Double Holiday Numbers, Free. Among the many famous contributors to these issues will be

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W. D. Howells

Dec. 1st issue. "The Watermelon Patch." A story of fruit-loving boys.

Lillian Nordica

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Conveying Estates in Trust.—A. V.—As so much is wasted by heirs who are incapable of properly managing property, can a parent give real estate to any of his children whom he pleases, and whom he knows will not waste it, tying it up so that the first generation cannot mortgage or sell it?—This may be done either by will or by conveyance, but in doing it you need the services of a competent attorney to draw the technical clauses in the papers required.

Credit for implements ordered furnished by overseer.—G. A. W., Montague, Mich.—Should the overseer of highways of any road district warn out a resident taxpayer to work his highway taxes, and order him to bring his team, plow and wagon, does the plow and wagon count on his highway labor, whether used or not, or whether they were only used an hour or so during the day?—The statute says that every overseer shall have power to require a cart, wagon, plow, scraper or road machine with yoke of oxen or span of horses, or more if needed, to properly do the required work, and a man or men to manage them, to be furnished by any person having the same within his district, and each implement named or team or man furnished pursuant to such requisition shall be deemed equivalent to one day's labor. As the statute uses the word "furnished," thus merely requiring the taxpayer to bring the machine, implement, horses or men upon the road, when they come directly under the control and authority of the overseer, we are of the opinion that the furnishing of the implements, plows, horses or men is all that is requisite to obtain the credit of one day's labor. It is the overseer's business to make the most of them, and the taxpayer has fulfilled his duty when he furnishes them.

Change of Name—Effect on Election.—Subscriber, East Lake, Mich.—A took out a homestead in this State and left it, and after a short time B, a neighbor, settled on the land and changed his name to A; was known before by the name of B, which is his correct name. Kindly answer the following questions: 1. Is it legal for a person to change his name except he applies to have it changed by act of legislature?—A person may legally name himself, or change his name, or acquire one by reputation, general usage or habit; so in the absence of fraud a person may do business and execute contracts under any name he chooses to assume. A name is a means merely for identification. 2. Is B entitled to the homestead after A has settled on the land and paid the first fees?—B can acquire such homestead by taking the steps prescribed by law in case A has forfeited all claim to the homestead. Whether or not A has forfeited his claims would depend upon the particular circumstances of the case. 3. Can anybody hold public office, state or township, if he is elected under the name of A when his right name is B?—Yes. The purpose of a name is merely to designate the person of the candidate, and if B is elected under the name A, and the voters know the identity of the name of A and the person B, the election of B is legal and valid.

The Markets.

WHEAT.

While the market has declined a little since last report, the general tone has been quite strong. There seems to be a general belief that the future of the wheat market will favor sellers. The west is marketing its crop freely, but in this State only an advance brings out stocks, and a decline at once stops receipts. Farmers are able to hold their crops in a majority of cases, and will do so. The advance and strong position held by oats and corn will undoubtedly help wheat. Of course, a good deal of the strength of the market comes from the large demand for export, and this is helped by the unsettled condition of European politics. There is a possibility of trouble between Great Britain, France, and Russia, and this is sufficient to give the wheat market a strong tone. As a matter of fact, however, we look for only talk between these nations, and doubt very much if either would take the initiative in so costly a struggle. The market closed weak on Thursday, with values somewhat lower than the previous days. Liverpool was slightly lower, and Paris a shade higher.

The following table exhibits the daily closing sales of spot wheat in this market from October 10 to November 3:

No. 2 No. 1 Mixed		Red. White. Red. White.	
Oct. 10.....	67 1/2	67 1/2	67
" 11.....	68	67 1/2	67 1/2
" 12.....	68 1/2	68 1/2	67 1/2
" 13.....	68 1/2	68 1/2	67 1/2
" 14.....	68 1/2	68 1/2	67 1/2
" 15.....	68 1/2	68 1/2	67 1/2
" 16.....	68 1/2	68 1/2	67 1/2
" 17.....	68 1/2	68 1/2	67 1/2
" 18.....	68 1/2	68 1/2	67 1/2
" 19.....	68 1/2	68 1/2	67 1/2
" 20.....	68 1/2	68 1/2	67 1/2
" 21.....	68 1/2	68 1/2	67 1/2
" 22.....	68 1/2	68 1/2	67 1/2
" 23.....	68 1/2	68 1/2	67 1/2
" 24.....	68 1/2	68 1/2	67 1/2
" 25.....	68 1/2	68 1/2	67 1/2
" 26.....	68 1/2	68 1/2	67 1/2
" 27.....	68 1/2	68 1/2	67 1/2
" 28.....	68 1/2	68 1/2	67 1/2
" 29.....	68 1/2	68 1/2	67 1/2
" 30.....	68 1/2	68 1/2	67 1/2
" 31.....	68 1/2	68 1/2	67 1/2
Nov. 1.....	68 1/2	68 1/2	67 1/2
" 2.....	68 1/2	68 1/2	67 1/2
" 3.....	68 1/2	68 1/2	67 1/2

The following is the record of the closing prices on the various deals in futures each day during the week:

	Dec.	May.
Friday.....	68 1/2	70 1/2
Saturday.....	68 1/2	70 1/2
Monday.....	68 1/2	70 1/2
Tuesday.....	68 1/2	70 1/2
Wednesday.....	68 1/2	70 1/2

The visible supply of wheat in the United States and Canada on Saturday last was 15,476,000 bu, as compared with 14,848,000 bu the previous week, and 26,974,000 bu at the corresponding date in 1897. The increase for the week was 628,000 bu. In the same week last year the increase was 2,345,000 bu.

Stocks in Liverpool decreased 448,000 bu. last month, and are unusually light for this season of the year.

Farmers in this State are not selling their wheat very freely, and last week it was nearly impossible to get sufficient to meet the demand for export.

The Jamestown, N. D., Alert says: "Traveling men and elevator people say that not over 40 per cent of threshing is done in the state. A great deal of plowing will not be done in consequence of grain being in shock. In the northern part of the state the weather has been so bad as to prevent threshing almost entirely in localities."

The shipments of wheat from India last week were just one-half as much as shipped the previous week, and about half as much as shipped the same week last year.

The St. Petersburg Journal of Commerce and Industry estimates the Russian wheat crop this year at 320,000,000 bu, and Russian requirements being put at 240,000,000 bu, the surplus for export and for reconstituting stocks is about 80,000,000 bu. We may add that the final official estimate of last year's crop was 336,000,000 bu.

Bad roads are said to be interfering with wheat deliveries in the northwest. Australian reports are to the effect that timely rains have greatly improved the prospects of the wheat crop.

The Northwestern Miller says: "There is a decided tendency among farmers to increase the acreage of winter wheat for the next crop. In Nebraska the acreage is estimated to be larger than ever before in the history of the state."

DAIRY PRODUCTS.

BUTTER.

The butter market holds strong at the range noted a week ago. The demand for prime grades of both creamery and dairy is very active, and considerable second quality of stock is taken simply because nothing better is available. Very little prime dairy is being received. Quotations are firm at the following rates: Creamery, 21¢@22¢; fancy dairy, 18¢@18 1/2¢; good dairy, 14¢@15¢; low grades, 6¢@7¢ per lb. At Chicago, the market is firm and active, with the advance noted last week fully maintained. In fact, a shade higher price has been secured on the choicest parcels. If the demand continues as good as at present, a still further advance would not be surprising, although it is well to remember that values are high for the season. Quotations there are as follows: Creameries, extras, 21¢@22¢; firsts, 19¢@20¢; fancy dairy, 18¢@18 1/2¢; good dairy, 14¢@15¢; low grades, 6¢@7¢ per lb. At Chicago, the market is firm and active, with the advance noted last week fully maintained. In fact, a shade higher price has been secured on the choicest parcels. If the demand continues as good as at present, a still further advance would not be surprising, although it is well to remember that values are high for the season. Quotations there are as follows: Creameries, Western, extras, per lb. 23¢; do firsts, 20¢@22¢; do thirds to seconds 15¢@16¢; State, extras, 22¢@23¢; do firsts, 20¢@21¢; do thirds to seconds, 15¢@16¢; Western, June, extras, 19¢@20¢; do seconds to firsts, 17¢@19¢; State dairy, half-firkin tubs, full made, fancy, 19¢@20¢; do firsts, 17¢@18¢; do thirds to seconds, 14¢@16¢; State dairy, firkins, fancy, 18¢; do seconds to firsts, 15¢@17¢; Western imitation creamery, finest, 17¢@17 1/2¢; do firsts, 14¢@15¢; do seconds, 13¢@13 1/2¢; factory, June, extras, 14¢@14 1/2¢; do seconds to firsts, 12¢@13¢; do current packed, finest, 13¢@14¢; do seconds, 12¢@13¢; do lower grades, 11¢@12¢.

At Elgin, on Monday, all the offerings were quickly taken at 22¢ for creamery, and the market closed firm at that price.

CHEESE.

Our local market is steady to firm at a range of 10¢@10 1/2¢ for the best full cream, and the situation promising a strong market for the present. At Chicago the market is fairly active and firm, with values showing an upward tendency. Quotations in that market are as follows: Young Americas 9¢@9 1/2¢; twins, 7¢@7 1/2¢; cheddars, 7¢@8¢; Swiss, 8¢@9¢; limburger, 5¢@7¢; brick, 6¢@7¢. The New York market has shown little if any change in either tone or value since a week ago. Supplies have continued moderate, but general demand is limited, and the offerings have been fully ample for all requirements; in fact, large white cheese has sold slowly and has been in some surplus. Only one or two exporters have shown any interest, and they generally looking for specially fancy large

colored, and when finding stock just suitable have not objected to paying 8¢, but that figure has been the extreme and not well enough established to quote, as bulk of business in average finest lots has been at 5¢. Large white has been freely offered at 8¢. Quotations in that market are as follows: State, full cream colored, or white, fancy, 8¢@8 1/2¢; do good to prime, 3¢@4¢; do common to fair, 7¢@7 1/2¢; do small, colored, fancy, 9¢@9 1/2¢; do small, white, fancy, 9¢@9 1/2¢; do good to choice, 3¢@3 1/2¢; do common to fair, 7¢@8¢; light skims, small, choice, 6¢@6 1/2¢; do large, choice, 6¢@6 1/2¢; do good to prime, 4¢@4 1/2¢; do common to fair, 3¢@4¢; full skims, 2¢@3¢. At Liverpool on Thursday the market for American cheese was quoted dull at 42¢ per cwt for best white and colored, the same price as quoted last week.

DETROIT PRODUCE MARKET.

Detroit, November 3, 1898.

FLOUR.—Quotations on jobbers' lots in barrels are as follows:
Straights.....\$3.75
Clear.....3.50
Patent Michigan.....4.75
Low Grade.....3.25
Rye.....3.25

CORN.—The visible supply of this grain on Saturday last in the United States and Canada was 24,574,000 bu, as compared with 24,833,000 bu the previous week, and 45,958,000 bu at the corresponding date in 1897. Quotations in this market are as follows: No. 2, 35¢; No. 3, 34¢; No. 2 yellow, 35¢; No. 3 yellow, 35¢ per bu. Market firm.

OATS.—The visible supply of this grain in the United States and Canada on Saturday last was 6,373,000 bu, as compared with 6,164,000 bu the previous week, and 15,361,000 bu at the corresponding date in 1897. Quotations in this market are as follows: No. 2 white, 28¢; No. 3 white, 28¢ per bu. Market very firm.

RYE.—The visible supply of this grain in the United States and Canada on Saturday last was 1,128,000 bu, as compared with 1,339,000 bu the previous week, and 3,442,000 bu at the corresponding date in 1897. No. 2 selling at 53¢ per bu.

BARLEY.—Market firm at 93¢@95¢ per hundred for good samples. Trade active.

CLOVER SEED.—Prime quoted at 4.5¢ per bu; December delivery, 4.50¢. Alsike selling at a range of 2.50¢@4.50¢ per bu for common to best.

BEANS.—The market is steady at 1.03¢ per bu for November and December deliveries.

FEED.—Bran, 12¢; coarse middlings, 13¢; fine middlings 14¢; cracked corn, 15¢; coarse cornmeal, 14¢; corn and oat chop, 13¢ per ton in jobbing lots.

APPLES.—Best winter quoted at 2.50¢@3.00¢ per bbl; fall apples, 1.75¢@2.00¢ per bbl.

QUINCES.—75¢ per bu.

PEARS.—Kaiser, 3.00¢ per bbl.

CRANBERRIES.—Cape Cod, 2.55¢ per box; Jerseys, 2.00¢ per bu.

EGGS.—Quoted at 15¢ per doz for fresh receipts, and 16¢ for candled. Cold storage 12¢@14¢ per doz.

ONIONS.—Selling at 35¢@40¢ per bu on market, and jobbers quote 35¢@40¢ in large lots.

CABBAGE.—Quoted at 3.00¢ per ton in large lots, and 1.00¢@1.25¢ per 100 on the city market.

POTATOES.—In this market quotations are 35¢@40¢ per bu; in Chicago, 2¢@3¢ per bu; Cleveland, 35¢@45¢ per bu; Pittsburgh, 40¢@55¢ per bu or 1.20¢@1.60¢ per bbl. Markets are generally quiet, but steady.

POULTRY.—The market is overstocked, and prices are lower. Quotations are as follows: Spring chickens, 5¢@6¢; fowls, 6¢@6 1/2¢; ducks, 6¢@6 1/2¢; geese, 6¢@7¢; turkeys, 7¢@8¢ per lb.

BALED HAY AND STRAW.—Best timothy, in car lots, \$8.00¢@8.50¢ per ton; rye straw, \$5.00¢; wheat and oat straw, \$4.50¢.

WOOL.—Nominal quotations in interior markets are as follows: Unwashed fine, 14¢@15¢; washed fine, 19¢@20¢; unwashed medium, 18¢@20¢; washed medium, 22¢@25¢ per lb.

HIDES.—No change in the range of prices. Quoted as follows: No. 1 green, 7¢; No. 2 green, 4¢; No. 1 cured, 9¢; No. 2 cured, 8¢; No. 1 green calf, 10¢; No. 2 green calf, 8¢; No. 1 kip, 7¢; No. 2 kip, 6¢; sheepskins as to wool, 40¢@70¢; shagwings, 10¢@15¢.

PROVISIONS.—Market quiet and steady. Quotations are as follows: Mess pork, 10.25¢ per bbl; short cut mess, 12.00¢; short clear, 11.50¢; compound lard, 4¢; family lard, 5¢; kettle lard, 6¢; smoked hams, 8¢@8 1/2¢; bacon, 8¢@8 1/2¢; shoulders, 6¢; picnic hams, 6¢ per lb.

COFFEE.—No change in values since a week ago. Quotations are as follows: Roasted Rio, ordinary, 9¢, fair, 11¢; Santos, good, 14¢, choice, 15¢; Maracabo, 20¢; Java, 26¢@30¢; Mocha, 28¢@32¢; package coffee sold on the quality plan on a basis of 9.50¢@10.50¢, less 75¢ per 100 lb case, in New York.

OILS.—Lined oils are higher, as is turpentine. No other changes. Quotations are as follows: Raw linseed, 34¢; boiled linseed, 35¢, less 1¢ for cash; extra lard oil, 50¢; No. 1 lard oil, 35¢; water white kerosene, 8¢, fancy grade, 11¢; deodorized stove gasoline, 8¢; turpentine, 12¢ per gal in bbl lots.

HARDWARE.—No changes have occurred in prices since a week. Quotations are as follows: Wire nails, 1.00¢; steel cut nails, 1.50¢ per cwt, new card, axes, single bit, bronze, \$5.00; double bit, bronze, \$8.50; single bit, solid steel, \$6.00; double bit, solid steel, \$9.50 per doz; bar iron, 1.35¢; carriage bolts, 75¢ per cent off list; painted barbed wire, 1.65¢; galvanized, 1.35¢ per cwt; single and double strength sheet iron, No. 24, \$2.50 per cwt; galvanized, 75¢ and 10¢ per cent off new list; No. 9 annealed wire, 1.45¢ rates.

DETROIT LIVE STOCK MARKET.

Michigan Central Stock Yards.

Thursday, Nov. 3, 1898.

CATTLE.
Receipts Thursday, 646, as compared with 503 one week ago. The quality was not very good, mostly common to fair butchers and stockers. Market active; good handy butchers strong to shade high-

er; stockers and common thin butchers weak to shade lower, \$4.40 was top price to-day for 20 fair butcher steers av 1127 lbs., and \$4.00 for 20 do av 906 lbs., but the bulk changed hands at prices ranging from \$3.25 to \$3.85; bulls, light to good butchers, \$2.75 to \$3.40; stockers, \$3.00 to \$3.70; feeders, \$3.75 to \$4.00. Veal calves—Receipts, 93; one week ago, 126; active at \$5.00 to \$6.50 per 100 lbs. Milch cows and springers lower; range of prices, \$30.00 to \$50.00 each; mostly \$35.00 to \$42.50.

Moreau sold Fitzpatrick 18 mixed butchers av 630 at \$3.20.
Cushman sold Cook 20 fair butcher steers av 906 at \$4.00.
Spicer & Merritt sold Kamman 2 bulls av 720 at \$2.90.

Glenn sold Fitzpatrick 7 mixed butchers av 777 at \$3.25; 2 steers to Mich Beef Co av 1,190 at \$3.75, 2 bulls av 880 at \$3.00 and 2 mixed at \$3.25.
Ed Clark sold Caplis & Co 6 mixed butchers av 775 at \$3.85 and a heifer weighing 530 at \$3.25.

Ackley sold Sullivan 4 cows av 1367 at \$3.00, 7 mixed av 865 at \$3.60, 3 do av 756 at \$3.40, 2 bulls av 830 at \$3.00, and a cow weighing 1000 at \$2.25.

Hawley sold Mason & F 10 cows and bull av 856 at \$2.40.

Kelsey sold same 13 mixed stockers av 885 at \$3.45, 3 mixed av 806 at \$3.00, and a bull weighing 650 at \$2.75; also 4 heifers to Sullivan av \$3.00.

Winslow sold Fitzpatrick 6 cows and bulls av 743 at \$2.65.

Heeney sold Caplis & Co 2 cows av 920 at \$2.75.

Bixby sold Mason & F 5 stockers av 538 at \$3.45, and 4 mixed stockers av 687 at \$3.40, and 2 bulls av 750 at \$3.40.

Watson sold Gill 10 stockers av 545 at \$3.50, and a cow to Caplis & Co weighing 1090 at \$2.70.

White sold Caplis & Co 18 mixed butchers av 787 at \$3.75.

Stevens sold Sullivan 4 heifers av 842 at \$3.70, and 10 steers av 652 at \$3.70.

Ed Clark sold same 11 steers av 735 at \$3.75.

Simmons & Son sold Mich Beef Co 8 steers av 875 at \$3.80, 2 mixed butchers av 955 at \$2.75, and 13 do av 733 at \$3.55.

Bandfield sold Mason & F 21 mixed stockers av 613 at \$3.40, 5 cows to Sullivan av 990 at \$2.90, and 21 mixed butchers to McIntyre av 630 at \$3.20; also 5 mixed to Mason & F av 428 at \$2.60.

Amerhine sold Vought 9 steers av 1100 at \$4.00.

Dennis sold Mich Beef Co 20 steers av 1127 at \$4.40.

Reason sold Caplis & Co 5 mixed butchers av 882 at \$3.25.

Roe & Holmes sold Sullivan 2 steers av 963 at \$4.00, 3 mixed butchers to Robinson av 843 at \$2.50, 5 do av 842 at \$3.50, and 2 do av 740 at \$3.50, 2 cows to Mason & F av 1090 at \$1.75, 5 stockers av 682 at \$3.50, and 2 bulls av 880 at \$3.00.

Roe & Holmes sold Sullivan 2 steers av 875 at \$3.90, and 1 weighing 1000 at \$3.75; also 5 fat cows to Magee av 926 at \$3.60.

Spicer & M sold Stewart 7 stockers av 620 at \$3.50, 4 mixed butchers to Kamman av 792 at \$3.50, 2 do av 910 at \$2.90, 5 do to Regan av 564 at \$3.30, 10 do av 710 at \$3.20, 8 cows to Magee av 872 at \$2.50, 18 mixed butchers to Michigan Beef Co av 782 at \$3.70, 17 do av 805 at \$3.70, 5 do av 700 at \$3.00, 7 stockers to Boston av 580 at \$3.40, and 2 heifers to David av 510 at \$3.40.

SHEEP AND LAMBS.

Receipts Thursday, 1,355, one week ago, 1,493. Market active and unchanged from prices paid one week ago. Range of prices: Lambs, \$4.50 to \$5.00; good mixed lots, \$4.00 to \$4.50; fair to good butchers, \$3.00 to \$3.50; culs and common, \$2.00 to \$2.50.

Davies sold Mich Beef Co 33 lambs av 68 at \$4.75 and 9 sheep av 102 at \$2.75.

Heeney sold Young 34 lambs av 75 at \$5.00.

Bennett sold Monaghan 48 mixed av 77 at \$3.40.

Stephens sold Young 28 lambs av 90 at \$4.90.

Hawley sold Fitzpatrick 18 lambs av 76 at \$4.75 and 8 av 60 at \$3.00.

Sharp sold Judson 32 lambs av 76 at \$5.00.

Knapp sold Fitzpatrick 37 mixed av 66 at \$4.25.

Youngs sold Mich Beef Co 28 mixed av 95 at \$3.25 and 10 do av 83 at \$3.00.

Watson sold Fitzpatrick 36 mixed av 73 at \$3.25.

Bergen sold Hiser 18 culs av 72 at \$2.00.

Glenn sold Mich Beef Co 64 lambs av 113 at \$4.50 and 71 sheep av 124 at \$4.00.

Spicer & M sold Monaghan 45 lambs av 70 at \$4.85 and 38 do av 85 at \$4.65.

Sweet sold same 46 mixed av 70 at \$2.80.

Roe & Holmes sold Robinson 38 lambs av 75 at \$4.75 and 26 mixed av 79 at \$2.50.

Sutton sold Mich Beef Co 122 mixed av 72 at \$3.00.

Mayers sold Sullivan Beef Co 35 mixed av 61 at \$2.50.

Roos sold Allen 52 lambs av 69 at \$4.65.

Reason sold Young 30 lambs av 79 at \$4.60, and 23 mixed to Sullivan Beef Co av 73 at \$2.85.

Pinkney sold Judson 53 lambs av 71 at \$4.75.

Spicer & M sold Sullivan Beef Co 27 lambs av 67 at \$4.75.

Rehuss sold Fitzpatrick 104 lambs av 68 at \$4.80.

Roe & Holmes sold Monaghan 11 lambs av 75 at \$4.50, and 51 sheep to Noble av 91 at \$2.50.

HOGS.

Receipts, Thursday, 6,200, as compared with 6,369 one week ago. Market active at prices 2½ to 5¢ below prices paid last Friday. All sold, closing steady. Range, \$3.50 to \$3.40; pigs and light hogs, \$3.15 to \$3.25; stags, one-third off; roughs, \$2.65 to \$2.75.

Rehuss sold Sullivan 164 av 102 at \$3.20.

Baldwin sold same 158 av 185 at \$3.35.

Bergen sold same 99 av 137 at \$3.25.

Bixby sold same 46 av 187 at \$3.35.
Watson sold same 39 av 160 at \$3.30.
Dennis sold same 125 av 192 at \$3.35.
Kelsey sold same 30 av 149 at \$3.30.
Roe & Holmes sold same 82 av 188, 133 av 178, & av 199, 87 av 184, 39 av 194, and 145 av 188, all at \$3.40.
Cushman sold same 30 av 144 at \$3.30.
Mayer sold same 77 av 202 at \$3.35.
Dennis sold same 76 av 204 at \$3.35, and 50 av 152 at \$3.35.
Sutton sold same 89 av 180 at \$3.30.
Reason sold same 80 av 197 at \$3.35.
Sutton sold same 137 av 182 at \$3.30.
Taggart sold same 69 av 248 at \$3.37½.
Pinkney sold same 47 av 178 at \$3.35.
Patrick sold same 128 av 202 at \$3.37½.
Roe & Holmes sold same 148 av 190, and 89 av 203 at \$3.40.
Stoll & Co sold same 75 av 158 at \$3.30.
Spencer sold Hammond, S & Co 74 av 187 at \$3.30.
McLaren sold same 84 av 187 at \$3.35.
Porgnitz sold same 40 av 196, and 27 av 164 at \$3.30.
Korff sold same 71 av 207 at \$3.40.
Sharp sold same 179 av 188 at \$3.35.
Youngs sold same 84 av 159 at \$3.30.
McHugh sold same 69 av 189 at \$3.35.
Bennett sold same 62 av 170 at \$3.35.
Spicer & M sold same 31 av 111 at \$3.20, and 66 av 188 at \$3.35.
Lomason sold same 70 av 211 at \$3.30.
Nichols sold same 155 av 184 at \$3.32½, and 38 av 148 at \$3.32½.
Clark sold same 148 av 194, and 123 av 187 at \$3.35.
McHugh sold same 130 av 195 at \$3.35.
Rook sold R S Webb 31 av 161 at \$3.30.
Taggart sold same 90 av 168 at \$3.35.
Spicer & M sold same 55 av 161 at \$3.40.

Friday, November 4, 1898.
CATTLE.

Receipts Friday, 4,868, as compared with 215 one week ago. The quality averaged about the same. Market fairly active and unchanged. \$4.10 was top price to-day for 13 steers av 1042 lbs, balance as noted. Veal calves and milch cows unchanged.
Spicer & M sold Mason & F 8 stockers av 583 at \$3.50. 15 do av 587 at \$3.50. 5 do av 612 at \$3.40. 3 do av 566 at \$3.50. 5 do to Sullivan av 600 at \$3.40. 11 do av 555 at \$3.50. 7 bulls av 677 at \$2.85. 3 do av 643 at \$2.70. 3 do av 626 at \$2.70, and 10 mixed butchers to Kammen av 689 at \$3.25.
Patrick sold Kammen 3 mixed butchers av 700 at \$3.40.
Roe & Holmes sold Mason & F 11 stockers av 660 at \$3.60.
Morea sold Sullivan 29 mixed stockers av 677 at \$3.35 and 24 do av 825 at \$3.35.
Hoffman sold same 11 mixed av 825 at \$3.05. 2 cows av 890 at \$2.50. 5 mixed stockers av 822 at \$2.05, and 4 oxen av 1065 at \$3.05.
H H Howe sold Clancey 2 cows av 1035 at \$2.55 and 6 steers to Sullivan av 713 at \$3.70.
Flyne sold Sullivan 4 steers av 812 at \$3.60.
Lovewell sold Caplis & Co 4 cows av 887 at \$3.10.
Stabler sold Sullivan 7 steers av 1048 at \$4.10.
Badgley sold Mason & F 3 bulls av 776 at \$3 and 10 steers av 776 at \$3.50.
Miller Bros sold Sullivan 7 mixed av 1099 at \$3.20.
Drace sold Mason & F 3 steers av 730 at \$3.60.
Carman sold Regan 8 mixed butchers av 765 at \$2.40. 5 bulls to Sullivan av 631 at \$2.85. 6 steers av 600 at \$3.45. 14 mixed butchers to Magee av 362 at \$3.35, and 7 light butchers to McIntyre av 420 at \$3.
Roe & Holmes sold Fitzpatrick 3 cows av 1095 at \$3.3. 3 steers av 800 at \$4. 4 mixed butchers av 907 at \$3.75. 4 do av 625 at \$3.70 do av 905 at \$3.7, and 2 cows av 1115 at \$2.50. 5 stockers to Mason & F av 622 at \$3.50. 2 do av 555 at \$3.50. a canner weighing 1000 at \$1.50, and 1 do weighing 500 at \$1.25. 2 steers to Robinson av 1000 at \$4 and 2 cows av 940 at \$3.50. 6 stockers to Mich Beef Co av 591 at \$3.40. 8 stockers to Sullivan av 621 at \$3.50, and 2 do av 400 at \$3.50.
Spicer & Merritt sold Gerow 5 stockers av 590 at \$3.35. 6 cows to Schleicher av 870 at \$2.60 and 17 mixed stockers to Godfrey av 420 at \$3.00.
Brewer & B sold Caplis & Co 5 mixed butchers av 714 at \$3.40 and 11 light mixed butchers to Schleicher av 553 at \$3.00.
Bullen sold Sullivan 13 steers av 1,042 at \$4.10.
Richmond sold same 10 mixed av 905 at \$3.50.
O'Connor sold Caplis & Co 9 mixed butchers av 684 at \$3.40.
Drace sold Hollomer 10 steers av 1,108 at \$4.00.
Purdy sold Schleicher 8 mixed butchers av 611 at \$3.50 and a bull weighing 800 at \$3.00.

SHEEP AND LAMBS.

Receipts Friday, 282; one week ago, 571. Market active; the few here changed hands early at about yesterday's prices.
Roe & Holmes sold Caplis 13 common butchers av 73 at \$2.25. 45 do to Mich Beef Co av 97 at \$2.70. 24 mixed av 102 at \$3.75 and 20 lambs av 59 at \$4.50.
Spicer & M sold Mich Beef Co 12 mixed av 92 at \$3.25.
Rutherford sold same 18 lambs av 78 at \$4.75.
Eddy sold Caplis 22 mixed av 78 at \$2.60.
Luckie sold Mich Beef Co 55 lambs av 64 at \$4.50.
Roe & Holmes sold same 46 lambs av 71 at \$4.90.
Lovewell sold same 20 lambs av 59 at \$4.10.
Hynes sold same 21 mixed av 58 at \$2.50.
Coates sold same 25 lambs av 58 at \$4.50 and 14 sheep av 103 at \$2.50.

HOGS.

Receipts Friday, 4,985, as compared with 3,934 one week ago. Market opened rather slow, later trade was active, and about all changed hands at prices 5 cents below those paid yesterday, or 7½ to 10 cents lower than closing prices one week ago; bulk at \$3.20 to \$3.35.
Discher sold Sullivan 66 av 198 at \$3.30.
C J Smith sold same 46 av 158 at \$3.35.
Coates sold same 39 av 167 at \$3.30.
Spicer & Merritt sold same 20 av 126 at \$3.25.
Roberts & S sold same 30 pigs av 99 at \$3.00.
Downer sold same 36 pigs av 113 at \$3.00.
Griffin sold same 83 av 143 at \$3.22½.
Allen sold same 166 av 174 at \$3.30.
McFall sold same 11 av 109 at \$3.25.
Ramsey sold same 90 av 127 at \$3.25.
Roe & Holmes sold same 70 av 127 at \$3.22½ and 120 av 127 at \$3.25.
Brighton sold Hammond, S & Co 18 av 205 at \$3.35.

Spicer & Merritt sold same 10 av 272 at \$3.35 and 9 pigs av 99 at \$3.15.
Fierstine sold same 48 av 186 at \$3.32½.
McCloughry sold same 40 av 188 at \$3.32½.
Wilson sold same 75 av 196 at \$3.30 and 93 av 156 at \$3.27½.
Stabler sold same 108 av 212 at \$3.35.
Bullen sold same 68 av 242 and 46 av 175 at \$3.35.
Wright & Lee sold same 31 av 167 at \$3.25.
Ramsey sold same 72 av 190 and 77 av 184 at \$3.32½.
Fox & Bishop sold same 90 av 203 and 63 av 192 at \$3.35.
Cassey sold same 72 av 148 at \$3.30 and 54 av 256 at \$3.35.
Luckie sold same 209 av 165 at \$3.27½.
Miller sold same 78 av 152 at \$3.45.
Eddy sold same 145 av 176 and 76 av 185 at \$3.27½.
O'Connor sold same 60 av 167 at \$3.27½.
Rutherford sold same 65 av 101 at \$3.20.
Parsons & Hobart sold Parker, Webb & Co 117 av 192 and 109 av 177 at \$3.35.
Roe & Holmes sold same 115 av 172 and 89 av 204 at \$3.35.
Astley sold same 172 av 194 at \$3.35.
Hyne sold same 60 av 192 at \$3.35.
Jedeite sold same 22 av 205 and 117 av 186 at \$3.30.
Fenton sold same 34 av 169 at \$3.25.
Roberts & S sold same 81 av 211 at \$3.35.
Hauser sold same 113 av 156, 125 av 195, 232 av 194 and 71 av 213 at \$3.35.
H H Howe sold same 62 av 168 at \$3.30.
F W Horner sold same 96 av 202 at \$3.35.
Spicer & M sold Parker, Webb & Co 64 av 183 at \$3.35.
Richmond sold same 84 av 175 at \$3.35.
Shelton sold same 119 av 191 at \$3.35.
Brewer & B sold same 65 av 167 at \$3.30.
McFall sold same 73 av 168 at \$3.30.
Carman sold same 31 av 163 at \$3.30.
Roe & Holmes sold same 69 av 202 and 150 av 189 at \$3.30.

OUR BUFFALO LETTER.

East Buffalo, November 3, 1898.

Cattle.—Receipts of cattle on Monday last were 6,622, as compared with 7,536 the same day last week. Shipments were 4,818, as compared with 4,224 the previous week. Monday the market opened with a fair supply of stock, and values steady on prime smooth steers and good butchers' stock, while common lots were slow and generally lower. The market was slow and lower on ordinary and light thin feeders and stockers, but choice lots held steady. The range on prime steers was \$5.05 to \$5.25; good to choice, \$4.60 to \$5.00; coarse fat steers, \$4.10 to \$4.40; common to choice butchers, \$3.90 to \$4.90; heifers, \$3.50 to \$4.50; cows, \$2.64 to \$3.75; \$2.75 to \$3.55. The close was steady for desirable cattle, but weak for other grades. Wednesday, with but few cattle on sale, the market ruled quiet and unchanged. Quotations at the close were as follows: Export and shipping steers—Prime to extra choice finished steers, 1400 to 1450 lbs, \$5.10 to \$5.25; prime to choice steers, 1300 to 1400 lbs, \$5.05 to \$5.10; good to choice fat steers, 1250 to 1300 lbs, \$4.90 to \$5.00; good to choice fat smooth steers, 1050 to 1200 lbs, \$4.60 to \$4.85; green coarse and rough fat steers, 1050 to 1400 lbs, \$4.10 to \$4.40. Butchers' native cattle—Fat, smooth, dry fed steers, 1050 to 1150 lbs, \$4.60 to \$4.90; fat, smooth, dry fed light steers, 900 to 100 lbs, \$4.35 to \$4.50; light to fair dry fed steers, \$4.40 to \$4.60; green steers, thin to half fattened to 1000 to 1200 lbs, \$4.45 to \$4.75; fair to good steers, 900 to 1000 lbs, \$3.90 to \$4.25; choice smooth fat heifers, \$4.25 to \$4.50; fair to good fat heifers, \$3.85 to \$4.10; light, thin, half fat heifers, \$3.50 to \$3.75; fair to good mixed butchers' stock, \$3.50 to \$3.90; mixed lots fair to choice quality fat cows and heifers, \$3.50 to \$3.75; choice to extra smooth, well fattened butcher cows, \$3.55 to \$4.00; fair to good butcher cows, \$3.35 to \$3.50; common old shelly cows, \$2.25 to \$2.50. Bulls and oxen—Export weight bulls, fat and smooth, \$3.75 to \$3.85; good fat, smooth, handy weight butcher bulls, \$3.35 to \$3.70; fair to good sausage bulls, \$2.75 to \$3.25; stock bulls, common to extra, \$2.75 to \$3.25; fat, smooth, young oxen to good lots fit for export, \$4.25 to \$4.50; fair to fairly good partly fattened young oxen, \$3.75 to \$4.00; old common and poor oxen, \$2.50 to \$3.50. Native stockers and feeders—Feeding steers, good style weight and extra quality, \$3.90 to \$4.00; feeding steers, common to only fair quality, \$3.50 to \$3.75; good quality yearling stock steers and calves, \$3.60 to \$4.00; stock heifers, common to choice, \$2.85 to \$3.25; stock steers, cull grades and throwouts, \$2.00 to \$3.50.

Thursday the market was quiet and unchanged.
Sheep.—Receipts of sheep and lambs on Monday last were 20,800, as compared with 15,000 the previous week. Shipments were 17,000, as compared with 9,600 the previous week. The decline on lambs still continues, and at the close on Monday prices were 10 to 15c lower than at the close of the week, while sheep and yearlings held about steady. Michigan lambs and sheep sold at the top prices of the day, some fancy lots being taken at \$5.40 to \$5.50, and sheep at \$4.65. These prices were above the market, and showed that a fancy article always commands a good price. The bulk of the sales on lambs ranged from \$4.25 to \$5.50; on yearlings, \$4.15 to \$4.75, and on sheep, \$2.50 to \$4.60. Tuesday the market opened weak but closed firmer at full Monday's prices. Wednesday there were but few on sale, and there was a fairly good demand for strictly good to choice ewe and wether lambs and best lots of sheep. Sales were made at the following range: Native lambs, choice to extra ewes and wethers, \$5.35 to \$5.50; buckey and fat, \$4.90 to \$5.15; culls, fair to good, \$4.25 to \$4.75; common to choice yearlings, \$4.40 to \$4.85; native clipped sheep, choice to selected wethers, \$4.55 to \$4.65; fair to choice mixed sheep, \$4.25 to \$4.45; culls and common ewe sheep, \$2.25 to \$4.00; Canada lambs, good to choice ewes and wethers, \$5.25 to \$5.50; good to choice, part bucks, \$5.05 to \$5.20; buckey lots, \$4.75 to \$5.
Thursday the market ruled dull and lower for lambs. Tops sold at \$5.25 to \$5.40; lambs, 190 up to 230, to \$3.50 to \$3.60; sheep steady at Wednesday's prices.

Hogs.—Receipts of hogs on Monday last were 30,690, as compared with 42,750 the same day last week. Shipments were 19,570, as compared with 22,800 for the same day last week. The supply was lighter than last week, and with the demand fairly active the market ruled 5 to 10c higher than at the end of last week. Later the market weakened, and the close was slow with most of the early advance lost. The range at the close for pigs to best heavy weights was \$3.25 to \$3.65, as compared with \$3.40 to \$3.75 on the previous Monday. The

quality was not as good as usual, Michigan sending a large number of light half-fattened pigs. Tuesday the market was stronger and slightly higher. The range was \$3.40 to \$3.75 for pigs up to choice heavy corn fed hogs. Wednesday the market opened with a moderate supply and a fairly active demand for good quality and weight Yorkers, and there was also a good inquiry for pigs, while other grades were only in fair demand. Prices ruled fairly steady, with pigs strong. Good to choice Yorkers, 175 to 185 lbs, \$3.65 to \$3.70; prime light Yorkers, \$3.65; grassy and Michigan lots, \$3.50 to \$3.60; mixed packers' grades, \$3.65 to \$3.70; medium weights, 200 to 240 lbs, \$3.70 to \$3.75; heavy hogs, 250 to 300 lbs, \$3.75 to \$3.80; grassy heavy ends, \$3.50 to \$3.65; roughs, common to good, \$3.15 to \$3.35; stags, common to choice, \$2.50 to \$3.00; pigs, good to choice, \$3.00 to \$3.70; pigs, skids, common to fair, \$2.75 to \$3.50.
Thursday the market was quiet at a decline. Good Yorkers sold at \$3.60; light, \$3.50 to \$3.55; pigs, \$3.55 to \$3.65; other grades, \$3.35 to \$3.65; good heavy, \$3.70.

THE CHICAGO MARKET.

Chicago, November 3, 1898.

Cattle.—The receipts of cattle in this market last week were 58,187, as compared with 54,017 the previous week, and 59,256 for the same week last year. The market opened firm and higher in view of the lighter receipts, the result of shippers holding back because of the heavy drop in values last week. Native steers advanced 10 to 25c, and Texas and Westerns ruled strong to 10c higher. Native butcher stock also advanced some, while stockers and feeders were unchanged. Native beef cattle sold at \$4.00 to \$5.55, bulk \$1.75 to \$2.00. The quality was poorer than usual. Corn-fed Western steers sold at \$1.00 to \$5.10; grass Western steers, \$3.50 to \$4.55, with some extra grassers at \$4.90; Western cows and heifers, \$2.75 to \$3.90; straight Texas steers, 737 and 1,060 lbs, \$2.90 to \$4.10; native cows, \$1.60 to \$3.85; heifers, \$2.50 to \$4.25; bulls, \$2.40 to \$4.15; stags, \$3.25 to \$4.25; calves, \$3.00 to \$6.75, and stockers and feeders, \$2.90 to \$4.50. Tuesday, receipts were again light, and the market held steady. Up to and including Wednesday of this week receipts have been 28,211, as compared with 42,601 for the same days last week. In the face of the great drop in receipts the market has not responded as expected; still the tone has been better than last week, and there has been a gain in some of the better grades. Buyers took all the good fat droves at steady prices, but for other lots the market was rather slow; choice steers, \$5.25 to \$5.70; medium, \$4.50 to \$5.00; beef steers, \$4.00 to \$4.60; stockers and feeders, \$3.00 to \$4.65; bulls, \$2.50 to \$4.15; cows and heifers, \$3.50 to \$4.20; calves, \$3.25 to \$7.25; Western rangers, \$2.60 to \$4.55; Western fed steers, \$4.00 to \$5.30; Texas grass steers, \$3.20 to \$4.40.
Thursday estimated receipts were 10,000; market ruled steady and unchanged.

Sheep.—Receipts of sheep in this market the past week were 50,216, as compared with 41,141 the previous week, and 44,259 for the corresponding week in 1897. The market opened slow on Monday, with trade in an unsettled condition. Before the close of the day a decline of 10 to 15c was established. The range of prices at the close was as follows: Lambs, \$3.75 to \$5.75; native sheep, \$2.75 to \$4.60; Westerns, \$3.25 to \$4.25; feeding lambs, \$4.50 to \$5.10. Tuesday the market ruled slow, but all good sheep and lambs brought as good prices as on Monday. Up to and including Wednesday of this week receipts have been 64,417, as compared with 60,258 for the same days last week. The general market was slow, with prices weak and uneven. There was a wide margin between fair to good lambs and the best. Very few buyers were on hand for feeders. Common ewes sold at \$3.40 to \$3.75; market ewes, \$3.75 to \$4.00; market wethers, \$4.15 to \$4.40; thin and common market lambs, \$4.25 to \$4.75; fair to good, \$5.00 to \$5.25; lots of good lambs sold at \$5.25; a few tops sold at \$5.40 to \$5.50. It is almost useless to give quotations on feeding lambs, as there have been no sales of note for several days.

Thursday the market was quiet and unchanged.

Hogs.—The receipts in this market the past week were 204,489, as compared with 208,852 the previous week, and 220,881 for the corresponding week in 1897. The lighter receipts failed to stimulate the market, and outside of the inquiry for prime, fat hogs there was no particular activity. Prime sorts sold freely at a nickel higher, in some cases 10c higher, but the ordinary packing grades, also light mixed, were barely a shade stronger, though buyers claimed they were 5c higher, but the sales did not show that advance. The general run of ordinary low grade packers sold at \$3.50 to \$3.60, a nice sort of mixed at \$3.65 to \$3.70. Prime mediums, nice, smooth selected butcher weights and shippers, \$3.70 to \$3.80; one lot of extra prime fat backs averaging nearly 395 lbs, sold at \$3.85. The bacon houses were buying mixed 120-lb up sort to 230 lbs to average 170 to 180 lbs, cost \$3.00 to \$3.10. Light 115 to 140 lbs, \$3.40 to \$3.45; pigs, 100 lbs and under, \$3.25 to \$3.35. Tuesday there were more on sale than on Monday, and values dropped 2½ to 3c from Monday's prices, the range being \$3.30 to \$3.40 for common light to choice heavy hogs, and on pigs, \$2.60 to \$3.55. Up to and including Wednesday of this week receipts have been 56,666, as compared with 121,148 for the same days last week. Values were 5 to 10c lower, and closed weak. Pough and common packers sold at \$3.30 to \$3.40; prime mixed packers, \$3.50 to \$3.60, largely around \$3.40 to \$3.50, the lowest prices and the weakest market at the close, although the provision market was a trifle stronger. The big shippers bought only about half their usual number, and the small shippers were entirely out of the market. Prime mediums, choice selected heavy and light-weight butchers, also shippers, sold early at \$3.70 to \$3.75, at the close, \$3.60 to \$3.75. In fact that was the range for nearly all. Nice light mixed, for the bacon houses, 130 up to 230, to \$3.55 to \$3.60; assorted, averaging 140 to 150 lbs, sold at \$3.00 to \$3.55. The little pigs of 100 lbs and under, \$3.10 to \$3.20.
Thursday estimated receipts were 39,000; market opened strong, but turned weak to shade lower. Light hogs sold at \$3.25 to \$3.63½; mixed, \$3.30 to \$3.67½; heavy, 5c lower; best heavy hogs, weakest; light, \$3.15 to \$3.70; roughs, \$3.15 to \$3.35; yorkers, \$3.55 to \$3.80.

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Miscellaneous.

THE CZAR'S MESSAGE.

Wake from a thousand thunderbolts one
crash;
Win from a thousand lightning-strokes
one flash;
Revive, in ravages of blasts and rains,
The uproar of a century's hurricanes;
Let earthquake, locked by slumber from
alarms,

Yawn yet again with subterranean arms;
Bid pest and famine riot anew; make all
A single concentrated blow to appall
Our world;—and still such magnitude of
might

Were weak beside the amazement, the
affright,
The opprobrium, eulogy, disdain or joy
Wrought in an hour by this Imperial Boy.

From lands that despotism and slavery
sear

What means his heavenly heart-cry, peal-
ing clear?

Aghast we marvel at the work so grand
That fate's miraculous mystery hath
planned.

Though oft her whims be wayward, sharp
her shocks,
Why daze us with such dizzying para-
dox?

Is this the Russia that we knew erst-
while,
Knights in her frown and sabers in her
smile?

Whose ruffian dynasty of sovereigns rose
Crime-crowned and ermined by Siberian
snows?

Whose thrones were scaffolds, and who
shaped her laws

Taloned with terror, like her bear's black
paws?

In galleries of whose palaces would lurk
Assassination with its butchering dirk?
The rubies of whose Urales were not more
Than blood-drops on her torture-cham-
ber's floor?

Whose halls of justice were a dungeon's
hells,

Whose juries were its Moujik sentinels?
Whose Alexanders, Katherines, Pauls,
Ivans

Gave every sin full freedom, yet slew
man's?

Ah, never yet, sage history, hast thou
known

Flgts thus from thorns or grapes from
thistles grown!

In vain, philosophy, shall thy best lore
This radiant inconsistency explore!

Yet even as through a swamp's dark reek
of mire

Some lily of taintless petal may aspire,
So climbs through tyranny's gross mirk
and bane

The power and splendor of a soul humane.
At last we read on destiny's dim scroll,
What empire may an emperor control.

And thrilled through earth's five conti-
nents we see

An autocrat's divine autocracy.

Heed it or scorn, ye kings whose prides
and fears

With death have barricaded your fron-
tiers:

Heed it or scorn, abuzz like broods of
gnats,

Ye deft and oleaginous diplomats;
Heed it or scorn, ye money-gorging mess,
Who coin from slaughter your percent-
ages:

Heed it or scorn, ye politicians wise,
Who garb self-worship in a patriot's
guise;

Heed it or scorn, ye concourse near and
far,

Who feast like vultures on the woes of
war,

And quaff with thirst unsated from their
blood

Inebriant vintages of tears and blood!
Heed it or scorn . . . Howe'er with
subtlest men

Procrastination on her crutch may lean;
Howe'er expediency, like some coy lass,
May attitudinize before her glass;

Howe'er sly sophistry, with leer of ice,
Clicks or manipulates his loaded dice;

Howe'er all hindrance, massed and in-
terbent,

Grow mountainous in its impediment,
Still shall this Message, rich with sacred
cheers

Lend ardor to the iconoclastic years,
And bid them, at some future hour's glad
reign,

Cleanse from all nations' brows the Brand
of Cain!

—EDWARD FAWCETT, in Collier's
Weekly.

THE LOVER'S QUEST.

BY ERNEST GLANVILLE.

Author of "The Lost Heiress," "The Fossicker,"
"A Fair Colonist," "The Golden Rock," &c.

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(CONTINUED)

"You are not strong, I'm afraid,"
said Miles, gravely. "But I must ask
you to help. It's a question of life
and death."

"I will do my best," said the other,
in a low voice.

"Thanks," said Miles, and went off
with Hans, leaving the stranger alone.

They soon came to the rock, a great
granite boulder, almost round, that
swayed to the slightest touch. Miles
thought to make quick work of the
business, and gave a heave with his
shoulder, but as soon as he released
his effort the boulder, which had
given a little, swayed back. The
crack of the revolver at the same time
showed that the stranger was at his
post. The two of them shoved, but
without any more success. Then they
brought stones, and while Miles
pressed the rock back, Hans kept it
from swinging back by undersetting a

stone. It was a tough job, that
brought the sweat streaming from
their faces, and made their limbs shake
with the exertion, but they were mak-
ing progress and stuck to it.

"Another heave," said Miles.
They put their weight against the
boulder again, when there came a
sharp cry from the wall.

"Run, Hans," said Miles, and leave
this to me."

Hans picked up his gun and darted
off, while Miles labored with strain-
ing limbs. He heard the sharp report
of a rifle, and the wild yell of the Hot-
tentot, followed by the deep, menac-
ing roar of the Matabele war-cry, and
setting his teeth, he made a last ef-
fort. The mighty boulder balanced a
moment, then . . . an inch, and he
just saved himself from falling for-
ward as it rolled over, and with a tre-
mendous report struck the platform
below, and bounded against the rock
beyond, scattering fragments, which
increased the terrific uproar. Picking
up his rifle, he flew to the wall, where
he found Hans in danger of being
overwhelmed. Emptying both barrels
into a crowd of dark forms, he
clubbed his heavy rifle, and jumping
to the wall, brought down the butt
with a sweeping blow. The sudden
attack, following immediately upon
the fall of the rock in the rear of the
attacking Zulus, and accompanied as
it was by shrieks and yells of fear
from the men on the platform below,
created a panic. Those men who were
in the passage, not knowing what dan-
ger threatened in their rear, turned
to fly, and once set going they again
fled to the bottom, hastened on their
way by a couple of shots from Hans.

Determined not to be caught again
in the same way, they filled the mouth
of the opening on the platform with
fragments of the boulder, and fired
the hut, which had been smashed by
the falling rock.

"I think the little man has been
hurt, baas."

"Who is that?" said Miles, wiring
his brow.

"The little karel baas did carry up."

In the excitement of the past few
minutes Miles had forgotten about the
stranger, but now quickly sprang to
the wall. There he found the lad, as
he appeared, stretched out again, as
if dead, but without any wound, and
with the emptied revolver firmly
grasped in his hand.

"Poor fellow!" muttered Miles, as he
picked up the lad. "He must have
been half-starved from the weight of
him."

CHAPTER XVIII.

Miles bore the insensible form once
again into the hut, and this time sat
with him long enough to give him a
drop of brandy on his reviving.

When he emerged from the hut there
was light enough to distinguish ob-
jects at a short distance, and he saw
Hans with a bundle of assegais com-
ing over the wall in the passage.

"There is six dead, my-baas, and I have
trowed them over to the ver-
domed skepsels below. One gun I
have found with bullets, and these as-
segais."

"It was touch and go, Hans, an-
other minute would have seen them
over the wall."

"Dat is so, sleur, but our skin is
safe. Is the little man dead?"

"He is not hurt at all."

"My! and he fall so, with a noise in
his throat like he swallowed a bullet.
I think, my master, we have come to
the end of the journey right here."

"We got away from the Arabs,
Hans, and out of the water pit. We
will get out of this."

"There is no water here, baas, and
no food."

"We should find water, gathered in
holes from last night's rain, and we
have food for a week if we are care-
ful. In a week, we can plan out some-
thing. That is, if we can hold the
place. Keep watch here while I look
about."

Miles ascended to the top of the
kopje and found himself on a perfect-
ly bare expanse of rock, covering
about a quarter of an acre, terminat-
ing on one side in a conical peak, and
on the other in a swelling mass that
overhung its steep sides. In the center
of the summit was a large fissure
filled with water, while at the other
places were perfectly round holes also
filled. There were three huts on the
top, besides the other two further
down, and in one of these he found
a grass basket filled with about a
mud of mealies, and a smaller basket
half filled with earth nuts. What,
however, was more satisfactory, was

the fact that the top could be reached
only by one path, and that he believed
he could hold against an army.

He went back to where Hans stood
to study the path in the growing light.
About fifty feet from the bottom the
path made a sharp bend to the left,
and opened on the lower platform, a
strip of rock about thirty feet in ex-
tent. It would never do for the enemy
to reach that spot again, and he re-
solved on removing the stones from
the upper wall to a spot lower down,
abutting on the upper side of the plat-
form. By doing this, they could com-
mand the approach and prevent any
men from getting a foothold. By us-
ing the fragments of the great boulder
he had toppled over he fixed the as-
segais secured by Hans in the narrow
opening opposite, with their points
sloping downwards, and jammed the
stout center pole from one of the huts
across the entrance, just in advance
of the spear heads. This precaution
would at any rate stop a sudden rush.

When this work was finished the
sun was well risen, and Miles, leav-
ing Hans on watch, went slowly up to
the hut to get a needed rest and a
mouthful of food. The thought of
the stranger had not been much in
his mind, but now he stooped down to
a closer inspection. He was glad to
see that the poor fellow was asleep,
but was moved to pity by the trace
of suffering on the thin white face,
and at the almost transparent look of
the small hand resting on the hollow
cheek. He was very young, and his
slight frame was evidently unfitted for
the dangers and hardships he must
have already encountered.

"Poor lad, poor lad, I wish he was
well out of this," muttered Miles, with
a sigh. Then, gently re-arranging the
rough pillow under the sleeper's head,
he stretched himself on the floor, with
his rifle ready to his hand, and was
soon sleeping heavily.

He had slept for a couple of hours,
seeming to him like two minutes,
when he awoke at a slight sound from
his companion. He sat up with his
hand stretched out instinctively for
his rifle. He was not a reassuring
figure, his eyes bloodshot from want
of sleep, his complexion almost black
from sunburn and smoke, and his
clothes torn and stained, and it was
not surprising that the young stran-
ger shrunk when the fierce questioning
gaze was turned upon him.

"Did you call me?"

"No," with a trembling of the lips
and a frightened look in the large hol-
low-rimmed eyes. "I didn't know
where I was."

"You are with friends, at any rate,"
said Miles, noting the signs of nerv-
ousness with surprise, and still keep-
ing his gaze on the pale face, totally
unconscious of his forbidding appear-
ance.

To his consternation the boy broke
into a wild fit of weeping, putting
both hands up to his face.

"That's right, old chap; don't mind
me. It will do you good, and I have
been near crying myself sometimes
lately. Just keep here while I get you
some grub."

He went out of the hut, thinking
a boy must be in a bad way when he
gives way to tears, then blamed him-
self when the thought struck him with
a stab that maybe the youngster was
grieving over the fate of friends
cruelly killed. He went first to see
how Hans was getting on, and found
that worthy doubled up, with his
mouth open, fast asleep. A hurried
glance below, however, showed that
the Matabele had not profited by this

slip, and, waking the old man, he sent
him off to make a fire and prepare a
meal, while he stepped down to the
platform to see, if possible, what the
enemy was about. Going down prone
on the rock he wiggled towards the
edge, then, with habitual caution, took
off his wide felt hat and held it out.
As he watched it, scarcely expecting
the enemy would be on the alert, the
hat swayed, and a hole suddenly ap-
peared in the crown, while a bullet
whizzed over his head and struck the
rock behind. He remained absolutely
still, staring at the hole, then with a
convulsive movement wiggled back.
There was something in this startling
evidence of watchfulness and deadly
marksmanship that unnerved him for a
time, but presently, after looking
about, he seized a large fragment of
rock and pushed it before him to the
brink and glanced down round the
corner of it.

The first object to catch his eye was
a solitary figure stretched out on the
veldt with his face turned up to the
kopje, and as he took in the dark
form spread out a thin whisp of smoke,
like a puff from a pipe, coiled up, and
the rock before him split to the smash-
ing stroke of a bullet, while the re-
port a second later smacked against
the base of the kopje and rolled
away. Miles was slightly bruised by
the concussion, and with the blood
trickling from a gash in his cheek
rolled away, and scrambling to his
feet put himself behind the wall with-
out further delay. He had had quite
enough proof of the alertness of the
enemy, and rather too much proof of
the enemy's skill. It astonished and
dismayed him to find that a black
man could shoot so well.

"Mine Gott," said Hans, running
down, "the baas is shot."

"No, Hans, it is only a cut," and he
explained what had happened.

"It was no Kaffir, baas. It is only a
Boer can shoot twice like that."

"Do you think so?"

"Ja, sleur. Ask the klein, baas;
when he hear the bullet smack against
the rock jes now he start like he was
hit."

"He's had a hard time of it, Hans.

What is he doing now?"

"He sits looking at the fire, and
bymby he look around, and bymby
he shake."

Miles went up and found the
stranger looking anxious.

"What has happened? You are
hurt!" he cried, coming forward quick-
ly, in a nervous, excited manner.

"I am all right," said Miles, pouring
himself out a beaker of black coffee.

"Have you had anything to eat yet?"

"I can't eat," was the reply, in a
low voice, while the sad, hollow eyes
were timidly fixed on the other's
bronzed face.

"That won't do. You must get your
strength back, for you know, I sup-
pose, we are in a very tight place, and
any moment we may be called upon to
fight for our lives."

The lad clasped his hands convul-
sively.

"Here," said Miles, with a slight
touch of impatience, "take a mouthful
of this; wait till I put in a drop of
brandy. There, now, drink that off,
and then take some of this mealie-
meal. It's not inviting, but it's filling.
Take it all now and no shirking."

Miles stood over the slight, shrink-
ing form to see his orders carried out.
"Come, that's better. Now, I want
you to tell me about your escape last
night, and all you know about the peo-
ple who are besieging us."

(Continued on page 353.)



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"I don't know! I don't know."

"You don't know?"

"It is a horrible nightmare. I thought I was killed last night when that man sprang upon me in the darkness and caught at my throat. How did I come here?"

"I dragged you up. I'm afraid very roughly," said Miles, staring at the white face with a strange feeling at his heart and a faint stirring of his memory.

"I thank you; oh, yes, from my heart and I wish I were stronger so that I could help you. Only two of you, and you have kept them back. But they will come again, for they are many and fierce."

"How many?"

"Quite fifty, I should think, though I did not see them all."

"Are any white men among them?"

"Yes, two men, who are always smoking."

"And how came you with them?"

"They took me by force. Five days ago, in the morning, the alarm was brought to my father's place that the natives had risen. There were three men, including himself, and in the afternoon two prospectors came in, making five. We were attacked in the evening. The natives were driven off. Next day they attacked again, but in the afternoon they drew off, and another white man—a friend of my father—rode in, narrowly escaping with his life. He said it was dangerous to remain there, and offered to lead us out by a path which he said was not guarded. My father declined to leave the store, which held all his property, and in the end I alone went off with this man. I did not want to go. I begged to stay with my father, but he thought it would be better for me to go, and the others agreed with him. I think we were almost free when we were suddenly attacked, and I was captured. The next afternoon a party of men left the main body, bringing me with them, and last night in the confusion of the fighting I ran off. That is all."

His voice sank to a whisper when he finished, and he shuddered several times in the narrative, clasping and unclasping his thin hands.

"I don't wish to trouble you," said Miles, gravely. "But could you tell me the name of your father's friend, the man who acted as your guardian?"

"My guardian?" A thin tinge of color came into the sensitive face. "Why do you use that word?"

"Pardon me," said Miles, "for having seen through your disguise. If I had known before you were a woman I would not have exposed you to danger."

The slight tinge of red deepened to a flush, while a faint smile hovered about the pale lips.

"My father thought it would be safer if I dressed as a boy, but I could see that you despised me," Miles made a gesture of denial, but she went on, clasping her hands, while the tears stood in her eyes. "Oh, do you think that he could hold out? He had stores and water and a great quantity of ammunition."

"He will hold out, be sure. The fact that he did not go with you showed that he had confidence in his position. Yet you have not told me the name of his friend."

"His name is Niekerk. Groot Adrian they call him from his size. He often came to our place on business, and was known as a great hunter. I think he escaped, and I hope he went back to the store, where he would be a great help, for he knows the country thoroughly."

"One more question, and I will leave you to rest. What name am I to call you?"

"I am afraid," she said, with another little smile, "I must remain a boy. Please call me Harry."

"Very well," he said, holding out his hand, "and try and believe that your father is all right. If it please God that we escape from here, we will try to find him."

He moved away with a sigh, troubled with the grief which she had struggled to hide in her brief story, and disturbed, too, by a recollection of another face which her pale features had awakened. He felt, too, a great burden of responsibility now that he had to watch over her safety, and next he wondered what motive the natives had in taking her prisoner, and in troubling to bring her all that way back, with such a large escort. Had that brute Stoffel any hand in the villainy? It was, he felt, more than likely, seeing that there were two white

men with the Matabele, who could only be members of Stoffel's band.

He had gone to the summit of the granite mass, and far around stretched the wide horizon, broken on the south by a rugged mountain ridge and filled in between by rolling gray veldt and dark strips of forest, while to the north was the somber unbroken line of forest along the Zambesi. As his eyes traveled slowly round the melancholy, unpeopled wilderness they were caught by moving specks to the south, and watching them he presently made out a number of men rapidly approaching. As they came nearer, he caught the gleam of colored shields, and next heard a shout of greeting from men below. In the night or early morning a messenger evidently had been sent off for reinforcements, and these were they. He counted them as they came on at a swinging trot, two and two, thirty in all, which, with the fifty men below, less the six who had been killed, would bring the attacking force up to over seventy. With such a force they would no doubt make a determined attempt to rush the kopje, and indeed, by way of earnest of their intention, the enemy, in true native fashion, sent a few bullets whistling harmlessly against the rock.

"Pass up, baas," yelled Hans, "they come."

(To be continued.)

BEAUTY IS BASED ON GOOD HEALTH.

"You are desirous of having a clear complexion?" inquires Ruth Ashmore in the November Ladies' Home Journal. "It is not enough that you simply treat yourself externally. The complexion is the thermometer that tells by its sallowness that the liver is out of order; by the red spots upon it that the stomach needs attention, and by its dull, heavy look that the kidneys demand treatment. Water externally and internally makes woman good to look upon. Taken internally, it flushes several important organs and acts upon them as a rinsing, carrying away all the poisonous matter that has so rapidly accumulated. Where your digestion is out of order a simple medicine recommended by a Southern mammy and found efficacious is a glass of hot water—not tepid, for that may cause sickness—in which has been thrown and dissolved a good pinch of fine table salt. It is possible that, just at first, when taken before breakfast, you may not care for this medicinal drink, and can only take one-half of it; but hoping on and hoping ever, you will get so that a gobletful of it is looked forward to with pleasure, while its effect is shown by the utter lack of pimples or spots, by the smoothness of the skin and the brightness of the eyes. If you find yourself growing weak from your work, then on a day when you have plenty of time take a tepid bath into which plenty of rock salt has been thrown, and rub yourself dry with a coarse towel."

HUMOROUS AND WISE.

A Southwestern Georgia couple, going to be married, the prospective husband said:

"Mollie, the last time I was married, I lost the ring fore I got to the parson's. But I'm shore of it this time!"

"Whar is it, John?" she asked.

"I've got it in my mouth," he said.

"I'm shore of it now!"

But when they stood before the preacher, the latter asked:

"Where is the ring?"

The groom gulped—choked—stuttered, and finally exclaimed in despair:

"Fore God, I done swallered it!"

In Braemar, Scotland, there once lived a good old Scotchman whose portion of worldly gear was a fair one, except that it included a scolding wife. She was noted all up and down the shire for her sharp tongue, and her husband, best of all, was prepared to judge for this. One day she died, to all appearances. Preparations were made for the funeral, and, indeed, it had progressed so far as the carrying out of the coffin, when in the narrow passage the well-meaning but awkward pallbearers jostled against it, and it was hit smartly upon the casing of the door. The next minute the scolding and only partly departed wife had come to life and sat up in her cements. What she said is not recorded, but a few years after that she died again, and this time they were fairly sure that they were dealing with the real thing. But when they bore her

down the hall again the bereaved husband called out in a shrill and anxious treble:

"Ca Canny! Ca Canny! (Go carefully.) It was there that she cam' roun' last time!"

A former member of the House of Representatives who has voted the Republican ticket ever since he was naturalized, visited St. Paul the other day and encountered an old friend, who questioned him about his method of voting in the House.

"I always voted Republican," he said, with a smile of pride.

"But how did you vote on questions before the House?"

"A Republican sit beside me," answered the statesman, "and ven he say 'yes,' I say 'yes,' too."

"But suppose he was absent when a vote was taken; what would you do then?"

"Vel, a Democrat he sit behind me, and ven he say 'yes,' I say 'no.'"—St. Paul Globe.

A Maori chief who lost £40 through a white storekeeper going through the bankruptcy court has given the following lucid exposition of this particular branch of British jurisprudence: "The pakeha (white man) who wants to become pakarapu (insolvent) goes into business, and gets lots of goods, and does not pay for them. He then gets all the money he can together, say £2,000, and puts all of it, except £5, away where no one can find it. With the £5 he goes to a judge of the court and tells him he wants to become pakarapu. The judge then calls all the lawyers together, likewise all the men to whom the pakeha owes money, and he says: "This man is pakarapu, but

he wishes to give you all that he has got, and so he has asked me to divide this £5 among you all." The judge thereupon gives the lawyers £4 and the remaining £1 to the other men. Then the pakeha goes home."—London Chronicle.

Gentleman (to an Irishman)—"Well, Pat, I see you have a small garden."

Pat—"Yes, sir."

"What are you going to set in it for next season?"

"Nothing, sir. I set it with potatoes last year and not one of them came up."

"That's strange. How do you explain it?"

"Well, sir, the man next door to me set his garden full of onions."

"Well, had that anything to do with your potatoes not growing?"

"Yes, sir. Bedad, them onions was that strong that my potatoes couldn't see to grow for their eyes watering."—Answers.

Mark Twain in Politics.—Once in a while Mark Twain has taken a hand in politics. On one occasion, being invited to speak for his fellow-townsmen, General Joseph Hawley, who was a candidate for re-election to the United States Senate, he said, in the course of a droll address: "General Hawley deserves your support, although he has about as much influence in purifying the Senate as a bunch of flowers would have in sweetening a glue factory. But he's all right; he never would turn a poor beggar away from his door empty-handed. He always gives them something—almost without exception a letter of introduction to me, urging me to help them."—October Ladies' Home Journal.

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Farmers' Clubs.

CONDUCTED BY A. C. BIRD.

All correspondence for this department should be addressed to A. C. Bird, Highland, Mich.

REVISION OF THE STATE CONSTITUTION.

Editor Farmers' Clubs Department: Will you please state in the next issue whether a new State Constitution would have to be submitted to the people for ratification?

Washington Co. GEO. W. BOYNTON.

It would, and a majority vote of the electors voting upon the proposition would be required to adopt.

GOOD WORK PLANNED FOR ANNUAL MEETING.

One of the most valuable sessions to local club work will be that of the afternoon of December 13, when two or three hours will be devoted to two-minute oral reports from the delegates regarding the best features of club work in their home clubs. Every delegate should have his report carefully prepared, as the time limit must be rigidly enforced. A great deal can be said in two minutes if properly boiled down. All should be supplied with note book and pencil in order that this valuable interchange of ideas on successful club work may be taken home to the local clubs by their representatives. This feature alone will more than repay in practical results every club represented.

THE WORK HAS BEEN WELL DONE.

More than two months ago a systematic plan was adopted by the State Association of Farmers' Clubs to secure from the various candidates for the legislature, irrespective of party, an expression of opinion regarding the County Salaries and Equal Taxation measures. Every farmers' club in the State was asked to attend to the work in its locality. In order that the people might know precisely what they were acting upon, copies of the two measures were furnished all the clubs by the Associational secretary and the full text of the Salaries bill was published in these columns.

The results have far exceeded the expectations of the most sanguine. Scarcely a club has failed to act energetically and judiciously in the matter; and in no instance, so far as we have been able to discover, has any candidate of any party failed to pledge loyal support to each of the two measures. By this systematic effort, so loyally entered into by the farmers of the entire State, the passage of the two measures by the next legislature is practically assured, providing always that the vantage ground already gained be not lost by future disinterestedness or neglect. The success of these two measures, now so probable, will appreciably lower both the State and county tax rates for many years to come, and no small amount of the credit will belong to the faithful farmers' organizations of Michigan.

This unanimity of effort among nearly three hundred clubs, and thirty thousand of the best farmers of the State, is a genuine surprise to those who have failed to keep in touch with the farmers' club movement. It is only a few years ago the idea of unanimity of action among so many farmers along such lines would have been ridiculed. Even the present effort has been treated skeptically by many a thoughtful man who has insisted upon judging the future solely from the past. But others, representing a great majority of the farmers' club workers, who had kept close watch upon the natural trend of the farmers' club movement during the past four years, and who in consequence appreciated the magnificent results achieved during the past two regular sessions of the State legislature, took hold of the present work with a confidence born of previous success, and to them the results are not at all surprising, although they are more perfect than had been anticipated.

Regardless of the party affiliations of the members elected next Tuesday to both House and Senate, a sufficient number are pledged in support of each of these measures to render the future work of the clubs and kindred organizations in their support absolutely certain of success.

To the farmers' clubs of Michigan

we can say without reserve. Your work has been well done, and the reward is near at hand.

ONE RESULT OF ORGANIZATION.

PRES. E. J. COOK, OF THE STATE ASSOCIATION.

Some time ago our local farmers' club discussed at length the subject of free rural mail delivery. A large amount of enthusiasm was engendered, and a live committee of two appointed to use every means at their command to secure for us this service. Other members of the club assisted. A business man of Owosso who stands very high politically in this part of the State rendered most valuable aid. The active co-operation of our nominees for State representative and senator in both parties was sought and secured. Our United States senators did what they could to influence the Postoffice Department at Washington.

The first evidence of success was the arrival at Owosso of Mr. F. M. Dice, of Indiana, a special agent of the Postoffice Department. The highways about the city were carefully inspected, and a route was recommended which will accommodate the larger portion of our club. We now have the assurance that upon November 1, free rural mail delivery in our locality will be a reality.

When we consider that only one hundred and fifty thousand dollars were appropriated by congress for the whole United States, was not this a victory of which we may well feel proud? When the Maple River Club, with only thirty voters, accomplishes such a work, what may not be achieved by the farmers of the State when thoroughly organized into local clubs, and these all united and directed by our State Association?

WHY I ATTEND THE STATE ASSOCIATION.

H. GAUNT, ASSOCIATION DIRECTOR.

We are looking forward again to the time when the Association will convene, where hundreds of representative farmers will assemble for a business meeting, where party and political wire pulling shall be laid aside, and principle will be the theme upon which each member shall aim to work for the advancement of right and justice. The time has come when our representatives and senators need instruction from those who are their constituents, and the Association of Farmers' Clubs may be a guide for, as well as a guard over, them.

The most important work that was ever brought before the legislature will be introduced at the coming session. And one of the most essential bills that the work of the Association will be brought to bear upon will be the County Salaries bill, which will seek to place county officers on a stated salary, and have the fees of the respective offices turned into the treasury. This will aid in lightening the burden of the overladen taxpayers.

The Atkinson bill, for the equalization of taxation, is one of the greatest measures that our law-making bodies will have to deal with. With the great monopolies on one side and the people upon the other, it is plainly seen that we need honest and reliable men to represent us in the senate and house. A careful investigation of these bills and with pledges from our respective candidates ought surely to leave no one in the dark as to how to vote.

Through the Editorial and State Association departments of the Michigan Farmer more knowledge has been gained in regard to our public institutions and their expenditures and appropriations than by any other means ever devised. The farmers are liberal and do not propose to cripple or lessen the usefulness of any public institution in the State. But as a matter of business we should see to it that they economize in their expenditures to correspond with the incomes of the taxpayers.

We urge that every club in the State be represented, as the annual meeting is a school of itself. We believe that many clubs are interested in discussing these questions; but without the united effort through the Association they can do but little.

The necessity of concerted action, for the general good of the people, the knowledge gained from the discussions of the many questions, the able reports of the working committees, and the pleasure of meeting with old friends and making new ones, are the reasons why I attend the Association meetings.

TO THE FARMERS' CLUBS OF JACKSON COUNTY.

I wish to call your attention to the condition our county is in regarding a set of Abstract Books. The county does not own a set of such books but loans a set from a private party, paying therefor a certain fee and keeping the books corrected up to date. It is rumored that said party contemplates the removal of the Abstract Books from the Register's office. Therefore I ask that the matter be brought before your clubs at the next meeting and thoroughly ventilated, and that an expression be taken as to what in your estimation is advisable to be done. This is requested in order that the supervisors may have the benefit of your opinions to help in their action regarding the matter.

A. AVERY,
Pres. Jackson Co. Association.

REPORTS FROM LOCAL CLUBS.

BYRON FARMERS' CLUB.

Club met October 13, 1898, at the home of Mr. and Mrs. L. C. Kanouse. Through some misunderstanding but few of the members were present. The house was filled with some of the best farmers of the town, and eight new members were added to our roll. The club next meets at the home of Mr. and Mrs. A. Orr, November 10.

Shiawassee Co. REPORTER.

EMERSON FARMERS' CLUB.

Club met at the home of Mr. and Mrs. W. L. Phillips, October 13. It being a rainy afternoon, few members were present. There were three visitors. Music, recitations, queries, and discussion. "Does it pay the farmer to spend one-half day each month to attend the Farmers' Club," was decided in the affirmative. Election of officers for the ensuing six months filled the afternoon profitably. Adjourned to meet November 10 at the home of Mr. and Mrs. Jotham Allen.

MRS. BLANCHE M. HETZMANN,
Gratiot Co. Cor. Sec.

BRIGHTON FARMERS' CLUB.

The October meeting was held in the village of Brighton, at the home of Thomas Hilton. The Association question concerning railroad taxation was discussed and the opinion prevailed that the most practical solution is along the lines laid down in the Atkinson bill; and the telegraph, telephone and express companies should be taxed on the same basis as other property. That as the time for selection is drawing near the farmers should work with all their might for equal taxation. Next meeting at the residence of John Morgan, November 10.

MRS. H. E. FOOTE, Cor. Sec.
Livingston Co.

THE HIGHLAND AND HARTLAND FARMERS' CLUB.

Farmers' Club met at the residence of Mr. and Mrs. Geo. Antin, October 15. The question on "Railroad Taxation" was discussed. Some favored the Atkinson bill till we could get something better, and thought that railroad property should be assessed in each township by the supervisor. The objection raised to this argument was that a large amount of the property was located in cities, and that there were townships that had no railroads; but in this case they would get the benefit of the State tax through the State Board of Equalization. It was thought that as railroad corporations have special privileges granted to them by State laws, such as large land grants and forcing right of way through any property, that their charges should be regulated to a certain extent by State laws. A vote was taken on the Atkinson bill, and all were in favor of it. The next meeting will be held at the home of Mr. and Mrs. H. Gaunt, November 19.

SYLVIA I. GAUNT,
Oakland Co. Cor. Sec.

SPRINGPORT FARMERS' CLUB.

The October meeting was held at the home of Mr. and Mrs. Geo. Wellington. About sixty-five members and friends were present to enjoy the occasion. The main feature of the meeting was a fair, at which was exhibited some very nice varieties of grapes, peaches, apples, pears, potatoes, corn and different grains etc. Among the ladies' exhibit was a vase of beautiful pink roses, home grown, exhibited by Mrs. M. L. Dey. There were also many other varieties shown.

The program was opened by original thoughts in form of quotations, followed by a selection of music. "Fruit raising upon the farm," was the subject of discussion, opened by Mr. Collin and B. A. Joy. The prevailing opinion was that a general farmer should not go extensively into fruit raising, as the

market was already flooded by the produce from the fruit belts, and it can be raised more cheaply there than by the farmer; however, the farmer should provide for his own use the different varieties of the different fruits, and of the best quality also. The care of the different vines and trees was discussed to some extent.

"In what way can mothers take a more active part in our schools," was discussed by Mrs. A. L. Landon, followed by an article read by Mrs. Dey on "Mothers in our Schools." There is much to be done by the parents, for a good school must begin with the patrons. Teachers need the encouragement of the parents, and the board must be upheld by them. A profitable school is a necessity in every community. Visiting school should be more general than it is at present.

November meeting will be held at the home of Mrs. C. A. Whitman, November 12. Thanksgiving sentiments will be quoted before the general discussion.

ADA WELLINGTON,

Jackson Co. Cor. Secy.

GREENWOOD FARMERS' CLUB.

Club met at the residence of H. Hewitt, with a good attendance. A part of the time was taken up in discussing the question, "Is it wise to use commercial fertilizers?" A diversity of opinions resulted, and the question was left open for further discussion. W. S. Hill was appointed a committee to write the several candidates for the legislature to determine their position on the County Salaries bill and other matters. The viewing committee reported the farm in good order. The club was invited to meet the Clyde and Grant Club in October. Next meeting with S. E. Rider, November 1.

St. Clair Co. S. E. RIDER, Cor. Sec.

WALES FARMERS' CLUB.

October meeting entertained at the home of Geo. King. At the ladies' session Mrs. James Dunning read a well-prepared paper on "Incidents in the Life of President McKinley." At dinner time a mammoth watermelon raised on the farm, weighing 51 pounds, like unto the "seven loaves," served the whole company.

The September Association topic, "The Kimmis bill," was taken up for reconsideration. President Dunn, and Messrs. Smith, King, Mason, Jennings and Maurer all favored the bill, and a resolution was unanimously adopted by the club favoring its passage. The Atkinson bill was likewise treated by the same unanimous vote. Next meeting at the home of Mrs. Geo. Green, November 4.

St. Clair Co. MRS. ALBERT HAND,

Cor. Sec.

PROGRESS FARMERS' CLUB.

Mr. and Mrs. Robert Shaw entertained the club October 5. There was a good attendance and great interest in the different subjects discussed. In the discussion of the Association topic, C. M. Pierce read portions of the Atkinson bill, and expressed the opinion that it covered the whole ground. It seemed to be the sentiment of the meeting that the bill was a good one, and that Governor Pingree ought to receive the hearty support of every fair-minded and honest citizen in the State for his efforts in behalf of the bill.

"Should Farmers Ship Their Own Produce?" produced a lively and interesting discussion. Messrs. Lewis and Shaw thought it not practicable at present, although there seems to be some advancement along this line. Mr. Lewis said he understood that the fruit-growers of Western Michigan had made a success of it. Others said the Grange was working along this line, and thought it only a few years when farmers would be selling direct to the consumer, and thus save the immense waste of the middlemen. An interesting paper by T. A. McComb followed. Next meeting with Mr. and Mrs. L. A. Bird.

Tuscola Co. REPORTER.

SPRING ARBOR FARMERS' CLUB.

The October meeting of our club was held at the pleasant home of Mr. and Mrs. Geo. Wheeler. The State Association question: "The most practical solution of railroad taxation," was opened by A. Avery, who thinks they should be placed on the same basis and taxed the same as farm property; he is not in favor of excusing them because they are a public benefit. Our State has granted railroads a vast amount of land and has been very lenient with them. Their taxes should be turned into a general fund, and not be placed where they would benefit any particular locality. Hon. H. N. Tefft very briefly outlined the Atkinson bill. Geo. Douglass thinks our State constitution should be changed; if railroads

can not run their business successfully and pay their share of taxes they had better sell out. Clark Wilcox thinks we should be reasonable in our demands. Railroads are a great public benefit. At the conclusion of this question, club adjourned to meet again Nov. 5, at the home of Mr. and Mrs. H. N. Tousey of Sandstone.

Jackson Co. C. J. R., Cor. Sec.
HOWELL FARMERS' CLUB.

At the September meeting the County Salaries Bill and the new School Law were discussed. Regarding the former a majority opposed the fee system and favored a stated salary, not only for county officers but for all officers. It was deplored that politics has so debasing an influence on those who enter the political arena; that oftentimes men who are honest before they entered politics betray the trust committed to their care. However, it was thought that some men are as true as steel and that money will not buy them, and that W. H. Allison could be listed in that category.

Neither free text books nor uniformity of text books had any admirers. The question box, among other things, brought out the following: "Should farmers hold their wheat for higher prices?" Mr. Hildebrandt disliked to advise, but should hold his wheat. Based his opinion on the fact that although we have a fair crop there was no surplus of old wheat. "Would you use wheat for seed that contained a little smut?" A long discussion followed regarding the cause of and remedy for smut in both wheat and oats, but no definite conclusion was reached. "How can the farmers' club be made a benefit to each one of us?" Mrs. S. Hildebrandt said she thought the club had been a benefit to us in the past and she knew no better way than to continue along in the same old lines.

Livingston Co. MRS. R. R. SMITH, Cor. Sec.
HOLLY CENTER FARMERS' CLUB.

The October meeting was held with Mr. and Mrs. Hiram Austin. After enjoying an entertaining program happily interspersed with music the Association question on "Railway Taxation" was opened up by Mrs. Divine. She was positive in her opinion that the supervisor in each township should be allowed to assess the railway property in his township the same as all other property. That the idea which is advanced that the supervisors would be incapable was nonsense. Robert Allen, the next speaker, stated that for once in his life he would agree with Mrs. Divine. F. F. Downey followed with the statement in the State constitution that all property should be taxed equally. Does a law that taxes railway property at one-tenth of the rate at which other property is taxed, fulfill the spirit of the constitution? Among the other speakers was R. K. Divine, who gave the club an interesting talk on the work that had already been done by the granges and farmers' clubs of the State, and urged the members as citizens to be up and doing, to pledge our nominees and then if the pledges were broken to cut off their heads politically that their places might be filled with men, not hirelings.

Oakland Co. REPORTER.
DUNDEE FARMERS' CLUB.

October club was entertained at the spacious home of Mr. and Mrs. J. F. Slayton. Attendance large, the rooms being filled to overflowing. The committee to interview candidates for the legislature reported that all were in favor of the County Salaries bill. "Do parents take sufficient interest in our public schools?" was thoroughly discussed. Rev. Ireland gave an excellent talk on current events. Meet with Mr. and Mrs. Coleman in November.

Monroe Co. COR. SEC.
LONG LAKE FARMERS' CLUB.

October session at the home of Mr. and Mrs. G. F. Clark. The County Salaries question was put over to the next meeting. "Fattening pigs for market," was discussed. Mr. Trapagan thought there was not much money in the business as his hogs that brought him \$10 cost him \$9.99 to prepare for market. November meeting at Mr. Trapagan's.

Genesee Co. S. A. S., Cor. Sec.
EXETER FARMERS' CLUB.

A most pleasant meeting was held in October at the home of Mr. and Mrs. J. J. Lautenschlager. The question box produced the question "Which of the modern inventions has been most beneficial to the farmer?" A lively discussion ensued with many diverse opinions. The Association question came up for discussion, but owing to the fact that we were arranging for

the winter institute to be held at Carleton, but little time was given to any of the discussions. I think all our members are in favor of the Atkinson bill. Six new members were added. Next meeting at Mr. and Mrs. Perry Palmer's.

MRS. B. F. KNAGGS, Cor. Sec.
Monroe County.
SAND BEACH FARMERS' CLUB.

Club met October 12 at the home of Mr. and Mrs. Hall. A paper, "Shall We Keep the Philippines?" was followed by a talk on "The Free Street Fair," participated in by the members generally. A paper by George Hall, on "Does Fruit Raising Pay?" closed the program. Next meeting with the corresponding secretary.

Huron Co. WM. HARGREAVE, Cor. Sec.
HILLSDALE-LENAWEE HORTICULTURAL SOCIETY.

Mr. and Mrs. David Gardiner entertained the society October 6. The Association question was discussed, Pres. Weed specially emphasized the point that it is not only our duty to send practical men of our own class to represent us in the State legislature but men who know and understand by personal experience the conditions and needs of the great multitude of the laboring and producing classes of this country. The meeting was a pleasant, enjoyable and profitable affair, and the past four years have demonstrated that the people of Eastern Hillsdale and Western Lenawee counties possess the necessary social and intellectual qualities to appreciate and maintain one of the largest and most successful farmers' clubs in the State.

Hillsdale Co. ORIN O'HARROW, Cor. Sec.
BURTON FARMERS' CLUB.

"Has the war set this nation back financially?" was discussed October 4, at the meeting with Mr. and Miss Guilford. Mr. Randall thought not, as the added revenue was so small on each article that it would be but little felt. Others thought there must be a loss somewhere as the people are the nation, and whatever affects the one affects the other also. In the discussion of the question, "Is it for the interest of the taxpayers of Michigan that the County Salaries bill become a law?" the sum and substance of the remarks seemed to be that the taxpayers ought to know what the officers are getting. The officers do not seem disposed to give such information and the most practical way of seeing that justice is done to all is to give them a stated salary, and have all fees turned over to the county treasury.

In the discussion of the railroad question a majority favored equal taxation. November meeting with Mr. and Mrs. Fred Love.

Shiawassee Co. L. W., Cor. Sec.
WEST AVON FARMERS' CLUB.

Club met with Frank Dutton, October 14. "Is it advisable for farmers to keep an itemized account of everything they sell on the farm?" was discussed. Messrs. Dutton, Johnson, Flummerfelt, Sherman, Cotcher and Fuller all favored it heartily though some had not practiced it. Messrs. Dutton and Fuller also thought a diary beneficial from a business standpoint. In the discussion of "Destructive insects on the farm and the methods of destroying them," Wm. Cotcher thought spraying of no benefit but Mrs. Bert Griggs said her husband practiced it successfully. "Shall farmers hold their potatoes for higher prices?" Messrs. Dutton and Fuller opposed rushing the stock on the market in its present green condition. Mr. Fuller predicted better prices and said we could not raise them for less than 17 cents per bushel.

Oakland Co. COR. SEC.
UNION OF MUSSEY FARMERS' CLUB.

A good membership was present at the October meeting with O. B. Smith. "What branch of farming pays the best?" A. Tosch said he could do the best with a variety of crops. Keeps all the stock his farm will support and has a little of everything to sell each year. Says he is trying to determine what will pay best, and as he is one of Mussey's bright young farmers we predict he will succeed. "Does it pay to experiment with new seeds and machinery?" was answered in the negative by Messrs. Ror, Smith and Churchill. Messrs. Tosch and Fairbrother, however, said they had got good potatoes and corn in that way. A. Balden spoke a good word for the Michigan Experiment Station along this line if only the farmers would profit from it. The question box demonstrated that the club meetings are a benefit to the farmers, and that the farmer's wife should be considered a full partner in his business.

St. Clair Co. R. M. MATTERSON, Cor. Sec.

The Poultry Yard.

SELLING EGGS BY WEIGHT.

When we see articles in the agricultural or poultry papers, urging the selling of eggs by weight, we often wonder why it is more unfair to sell eggs by the dozen than many other things by count or by measure. If we have a barrel of squashes for sale, we should find it difficult to obtain any more for them if they weighed 120 pounds than if they weighed only 80 pounds, yet it is easy to find two strains of the same variety, and particularly of the marrow squash, in which there will be nearly or quite that difference. One will be thick meat, and the other is but a shell, with a little meat and many seeds. One which weighs 15 pounds looks but little if any larger than one which weighs 10 pounds. Other vegetables might be named which the seller is not required by law to weigh, and for which no legal weight is fixed, which vary greatly.—American Cultivator.

If the squashes were sold by the barrel then the weight of the contents would be about the same, no matter what the weight of the single squashes. But eggs by count will vary greatly both in weight and the amount of space the same number will occupy. If those squashes are large it will take less of them to fill a barrel, but no matter how large eggs are it will take the same number to count a dozen. If they were sold by the barrel or the bushel it would be much fairer than the present system, as it would take a less number of large ones to fill the measure. There ought to be some means adopted whereby an egg weighing one-third more than another would bring its owner full value. We don't know how it is in Massachusetts, but in this State there is an established weight per bushel for all vegetables, and it is the proper and honest way to sell them.

POULTRY COMMENTS.

In an issue of the Orange Judd Farmer I note the following: "Cracked corn is a good food for growing chicks of a fair size, providing plenty of grit is furnished, but not otherwise."

If the above line or two had appeared in a fancier's periodical devoted to the interests of those who are raising poultry in a limited space, as is often found on a small city lot, it would have passed without comment. But to appear in the columns of an agricultural paper as an editorial, it makes one think that the editor is very distantly connected with the farm, or practical poultry raising on a farm. I dare venture that out of perhaps thirty-five thousand farms which The Farmer reaches every week there are not one hundred but have made corn in some form, either coarsely ground or cracked, the principal feed all summer, and a very small per cent of these have made any pretensions whatever towards supplying the chicks with sharp grit. Still farmers and farmers' wives are informed that it won't do. I am fearful that the esteemed editor has been reading some ultra fancy stock paper, and forgot that the average farmer does not raise his yearly stock of poultry in a little ten by twenty yard, as many city fanciers are compelled to do; under such conditions, I have no doubt that his logic is all right, but it doesn't apply to the average farmer.

In the same periodical, a little lower in the column, I note another interesting item as follows: "September is the best month of all for rapid growth of young birds. Fall hatched chicks make the best spring and summer layers."

I am entirely at a loss to understand what combination of circumstances would tend to make this month, which in nature is the season well towards maturity, the best month of all for hatching young stock. I am utterly unable to appreciate the conditions that must arise that will make September, with its frosts, hot days and cool nights, with its vegetation yellow and dead, and its near approach to winter, a better month than May and June, with the advantage

[Continued on page 356.]

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of being nature's season for hatching and rearing its young, green grass to come, and the ground freshened by a winter's purification. It is difficult to understand the climatic conditions that would tend to make September the preferable month of the season, either for rapid growth or hatching. Certainly, it would have to be much different than what is usually experienced here in Michigan.

There is no question but what the person who is favorably situated, and has the means at hand, can successfully hatch and rear chickens late in the fall, but for the average farmer it is not only impracticable but unwise to make the attempt hoping for success. Let everything have its season and adhere strictly to it, and it will be far more satisfactory to all concerned. Late hatched chicks will not make winter layers, and if they do anything at all it must be in the spring and summer, when eggs are sure to be the cheapest. On the other hand, if a chick is out early, there is ample prospect that it will be able to lay during the coming winter if it is properly cared for, and it will also be in good condition for the coming spring as a rule.

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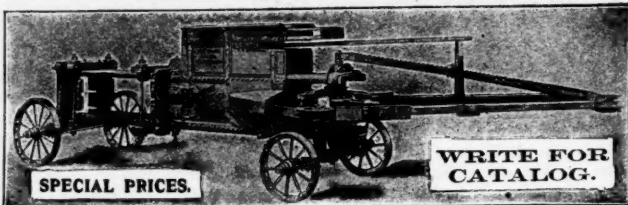


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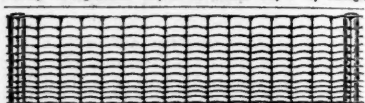
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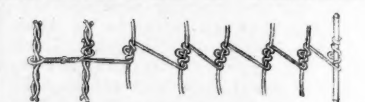
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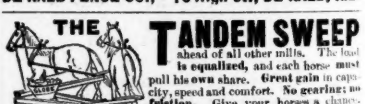


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